

X Platform Catalogue

English

Issue 48
2019/2020

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Your Problem, Your Solution, Our Technology.

Your company faces the same old problem: How to make money today and how to make money tomorrow?

The varied solutions to this ever-present question do however alter over time. Industrie 4.0, and the digitalization of the information thread that runs throughout the company have brought new and innovative solutions. **They fall into 8 distinct categories where every company is competing within:**

1. Data-driven Plant Performance
2. Data-driven Inventory Performance
3. Data-driven Quality Improvement
4. Machines as a Service
5. Human data interface
6. Predictive Maintenance
7. Remote Servicing
8. Virtual Training and Validation

Many of our competitors say that they offer solutions, so maybe EXOR can also tell what you should do? Maybe EXOR should give you the solution that would work in your industry, in your company, in your unique place in the world?

Yet it seems to us that to answer yes to these questions would be to diminish the importance of the challenges that you face. Because your company is unique. You have multiple years of experience in your sector and **only you can provide the solution to your problem**. Only you and your team can truly envisage how to make money today and tomorrow.

What EXOR International can offer you is the ability to securely acquire data from almost any approval critical location across multiple vendor and protocols, powerfully work with this data in real time at the edge and then send this data to a robust cloud to visualize, manipulate and analyse.

With Our technology, we are able to help you implement Your Industrie 4.0 solution to Your business problem.

That's why EXOR International is a technology provider

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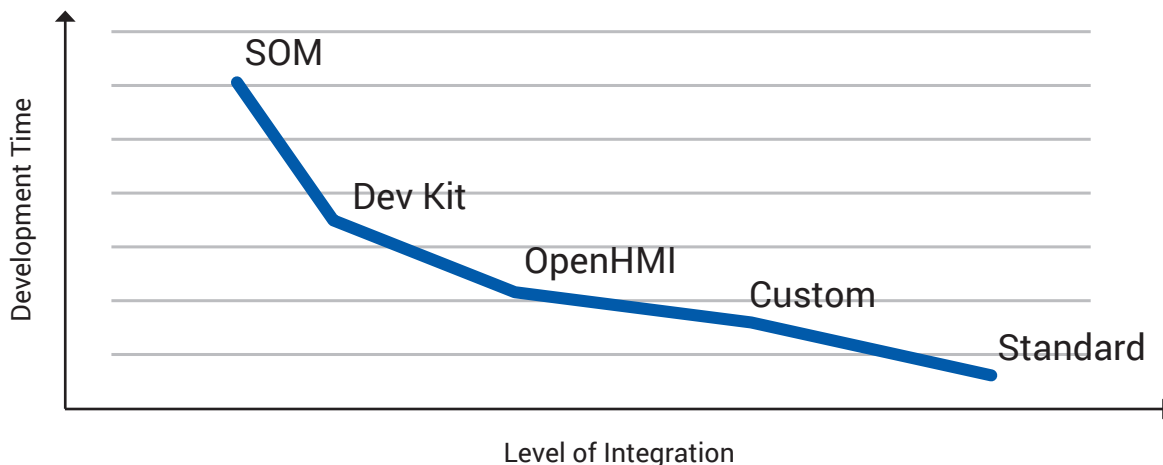
The X Platform

The X Platform unifies all the products and services that fall under the umbrella of EXOR International. From the very smallest building blocks of any IoT project, through the implementation of any of the eight benefits of Industrie 4.0, to the requirement of a custom or standard high-performance gateway or HMI, the X Platform is able to offer the products that you need.

At the component or machine level the X Platform specializes in **smart edge human data interfaces** that are both impressive in their functionality as they are unique in their aesthetic appeal.

At the factory level the X Platform offers **smart edge computing power** that allows the visualization of data simultaneously acquired via multiple protocols from all the major vendors.

The X Platform completes the offers with a **robust industrial cloud** where by the secure visualization of data many of the Industrie 4.0 opportunities can be realized for your unique company.



However the X Platform is not just a technology platform... it includes the nearly 50 years' experience EXOR International has in designing, building, manufacturing and maintaining the software, firmware and hardware necessary for all human machine interfaces. This experience really shows its value when any project comes up against a problem, as all projects do. **It is in these moments EXOR International can demonstrate how effectively the X Platform operates: it truly is a collaborative platform**, ideal for Industrie 4.0 model implementation in industrial, marine, automotive, oil & gas and building sectors.

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X Platform Components

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Software

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Visualization and Connectivity Software

JMobile is a principle driving force in the X Platform.

In just one easily learnt software suite, JMobile **completely covers** the connectivity, device management, process management and data visualization essential for the lower levels of **any Industrial IoT platform architecture**.



JMobile®

- High User Interface Experience
- Create IIoT ecosystems with reduced risk
- From Shop Floor to Cloud / Big Data
- Real Interoperability
- **Great HTML5 interface with JM4web**
- Create Alarms with associated Alerts
- Efficient scripting with JavaScript
- More than 200 communication protocols readily available for all platforms with gateway function
- Browser widget
- Integrated PLC runtime as an option for compact control solutions. Include full support of networked I/O
- Software and documentation available in 4 languages: EN, DE, FR, ZH
- Multi platform runtime: Linux ,Windows, Windows CE
- **OPC UA Full Compatibility**

The **three principles that have guided and will continue to guide** the development of JMobile are:

1. **Remain open** to the major fieldbus / protocols of communication
2. **Use open and universally recognized** market technological standards such as HTML5, SVG, XML
3. Integrate selected market-leading **3rd party software with a seamless UI and extremely secure.**

These three principles working together offer EXOR International and our customers the best of all situations where the secure, solid JMobile backbone of highly critical software is able to contain and implement all the software required for Industrial IoT implementation.

Recent Updates Have Included

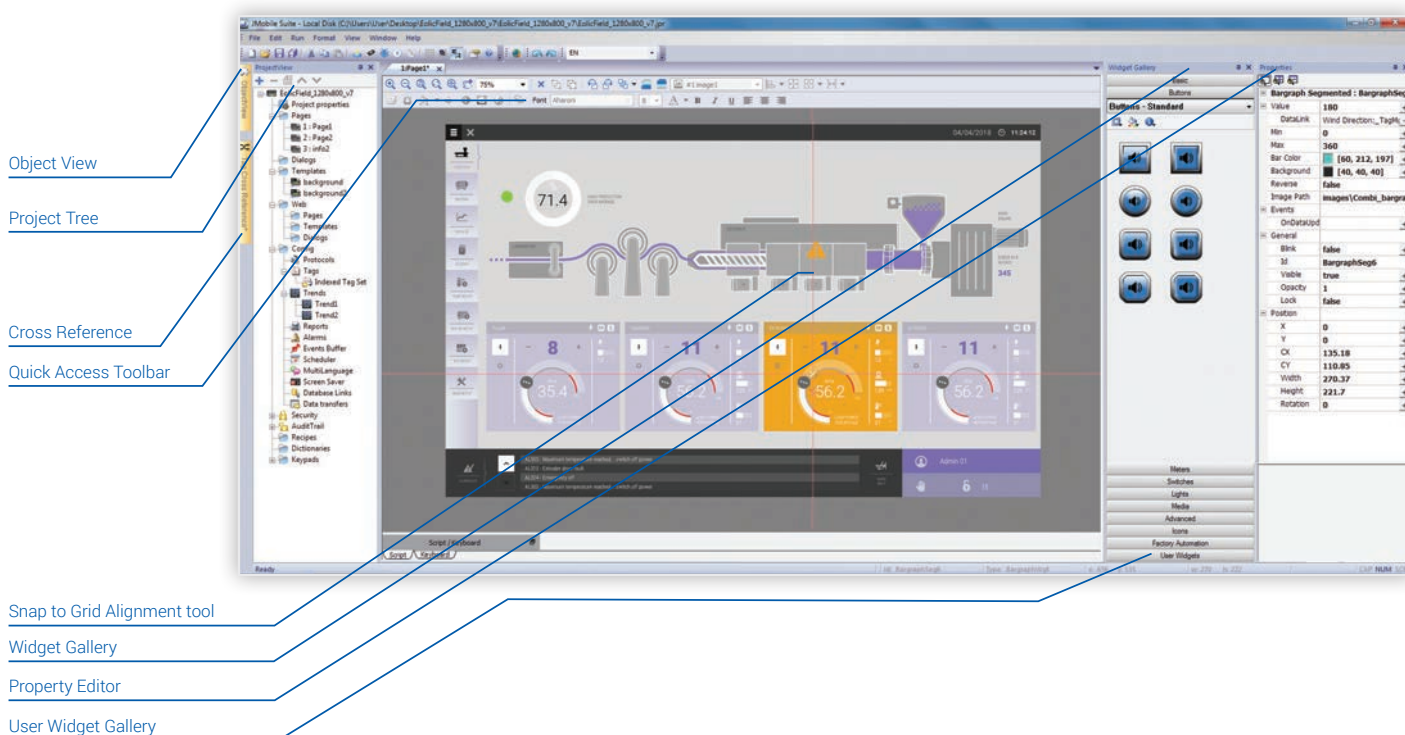
Enhanced security for pharmaceutical applications with new features in compliance with FDA 21 CFR part 11: electronic signatures, full audit trail support, signed reports with x.509 certificates. EXOR International is committed to maintaining JMobile ready to respond to the increasing demand for security in applications.

New **support for inheritance** while editing custom widgets takes programmer's productivity to new levels. Editing even the most complex custom-developed widgets easily propagates throughout applications.

While more and more JMobile functions are now available with **JM4Web HTML5-based interface**, the new native JMobile client for Linux-based devices offers the fastest and most efficient method to distribute HMI data.

JMobile Table Widget, introduced with the previous release of the software, proved to be a great tool to quickly create even the most complex table presentation for runtime. Now the new table tools have been used to redesign an improved presentation for JMobile alarms, audit trails and trend data.

Communication is always a central point in JMobile applications; **now programmers get the chance to create their protocols, both IP-based and serial**, with the new Direct Socket and Direct Serial tools!



Pure Web Technology

JMobile 4 Web is the seamless connection between Industrial control applications and ubiquitous mobile devices such as smart phones and tablets.

Developed ahead of the market's vision in 2010 and continuously updated ever since using the very same guiding principles for JMobile, it now provides the most comprehensive Pure Web Technology available. Designed and maintained by EXOR, a company with 45 years experience in the industrial sector.



- Pure Web Technology
- Created and Developed since 2010
- Based on HTML5/JS
- Secure connection with https protocol support
- 100% HTML5 web HMI Interface
- Ready for responsive design
- Realtime Data Update (up to 10x per second)
- Multitouch Support
- Ready for most common Browsers for PC and Smart Devices with iOS and Android
- Ease of Use. No HTML competence required
- Full JMobile library of over 2000 Widgets
- Available as Component for 3rd party platforms
- Data Acquisition and Trends
- Recipes
- Multilanguage
- Javascript
- User management
- Canvas and custom widgets

Overview

With HTML5 and Javascript technology embedded in JMobile, all that is needed to remotely monitor and control applications is a web browser with HTML5 support: Firefox, Chrome, Safari and Microsoft EDGE. No "apps" needed when operating from mobile devices, hence reducing the risk of compatibility across various operating systems.

With JM4web you can have instant Web access to JMobile applications via the integrated Web server included in all JMobile runtime systems.

JM4web allows for creating the exact responsive user experience for the target mobile device. The Web server will detect the resolution of the connected client device and serve the appropriate pages.

JM4web is the ideal complement to the powerful remote connectivity and visualization tools already available in JMobile.

Cloud

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Connectivity Management

Corvina Cloud 1.0 is an **advanced connectivity management solution that puts you in control of your IIoT business**. Leading seamlessly from the JMCloud offering, Corvina Cloud 1.0 is powerfully robust, highly scalable and offers advanced VPN capabilities.

The user interface is incredibly clean and easy to use. Web-based it allows all your remote devices, networks and users to be able to communicate securely.

Corvina Cloud 1.0 **can be offered as an on-premise cloud infrastructure** that delivers the uptime and performance needed for industrial applications and control services at any scale.

This IIoT-ready, secure, and user-friendly platform dramatically reduces the excess costs involved with installation and maintenance as well as preparing you for the new IIoT business models of tomorrow.

Benefits

- Single click of the mouse to gain access to all devices
- Enables maintenance and installation cost reduction
- Increases Industrie 4.0 implementation by completing the IIoT Whole Product Solution of the X Platform
- Allows new business services opportunity to final user
- Shows location and status information of all devices in the field
- Access to web server of device using standard browser on pc, tablet and mobile
- Creation and management of multiple small entities on the same installation.
- Break up a large enterprise into smaller departments, that shall remain separate and host all of them on a single Corvina interface.
- Completely accessible and configurable from browser



Recent Updates Have Included

Direct access application

Possibility to create a user that can access only one application on a single device

VNC runtime Password

Possibility to enable runtime password for VNC connections

PLCM09 3G modem Compatibility

Usage of the PLCM09 3G modem with Corvina Cloud 1

Light White Label Branding

Possibility to customise logos and portal login address for a first level organisation

Cloud credential and other configuration setup using USB

Possibility to set Corvina Cloud 1 credential and other parameters using script file on USB

Network Address Translation (NAT) rules on eXware,eX700 using USB

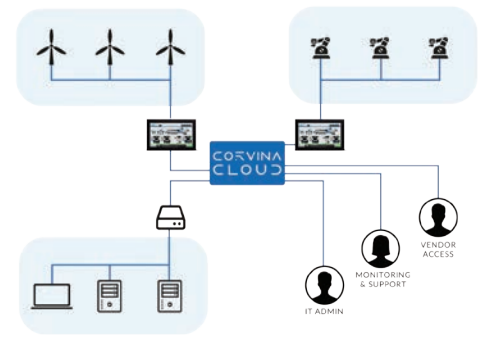
Possibility to set NAT rules on eXware and eX700 devices using a script file on USB which then functions with Corvina Cloud 1

Advanced VPN for IIoT Security

A powerful and highly scalable solution that offers **advanced VPN capabilities** with a simple web-based interface allows all your remote devices, networks and users to be able to communicate seamlessly.

Industry standard **encryption technology** ensures your data stays protected in transit for complete IIoT security.

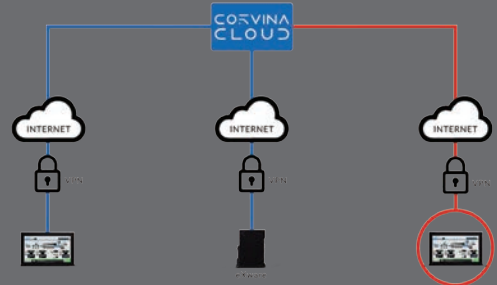
Granular role-based access permissions allow **users to only gain access to required resources and nothing else.**



Isolating for Maintenance and Installation

Corvina Cloud 1.0 uses a SSL VPN technology (OpenVPN) to allow both installation and maintenance to be made remotely and highly securely.

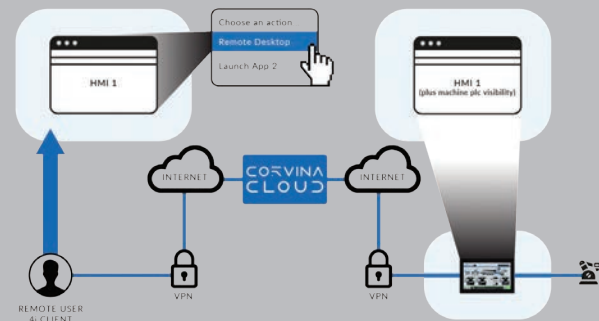
Non functioning devices can be identified from the portal and isolated to be worked on. This can help save time and money and minimize network downtime.



Applications

In traditional VPN solutions, there is no support for helping users to identify or link their local applications to remote VPN resources. This has the consequence that users have to remember IP addresses or require the use of complicated DNS systems.

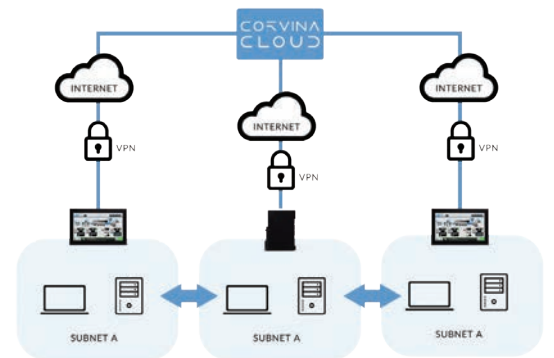
Corvina Cloud 1.0 solves this issue by allowing you to specify "application links" which will launch a local application on a user's computer and connect it to a remote resource automatically and with just a single click of the mouse.



Subnet Mapping

One of the most common challenges industrial networks are faced with is the problem whereby multiple locations have the same subnet, making it impossible to implement a central VPN management tool without significant intervention.

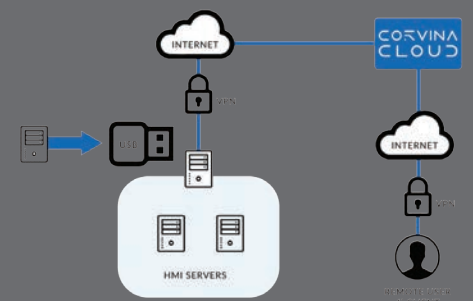
Corvina Cloud 1.0 is the only solution on the market that can seamlessly resolve this routing nightmare, allowing your deployment to go smoothly.



USB Provisioning

With distributed networks that span large territories, it's common for the IT staff to experience a lot of traveling to deploy network equipment. This takes a lot of time, not to mention incredible cost.

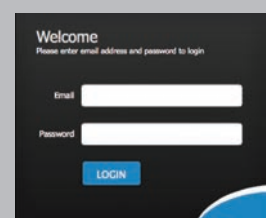
With the USB Provisioning tool, devices can be easily pre-configured on a USB stick and shipped out to their location for a simple, secure installation.



Web access using standard browser

Corvina Cloud uses web proxy technology to allow usage of standard browser to connect to portal with security HTTPS protocol

It is possible to access to local display of device using VNC client integrated into portal. It is possible to access to web server of device using standard browser





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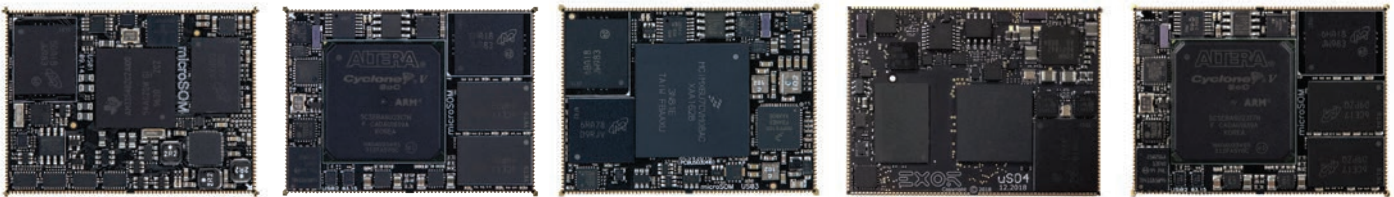
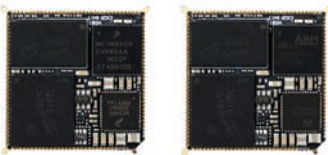


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EXOR Embedded

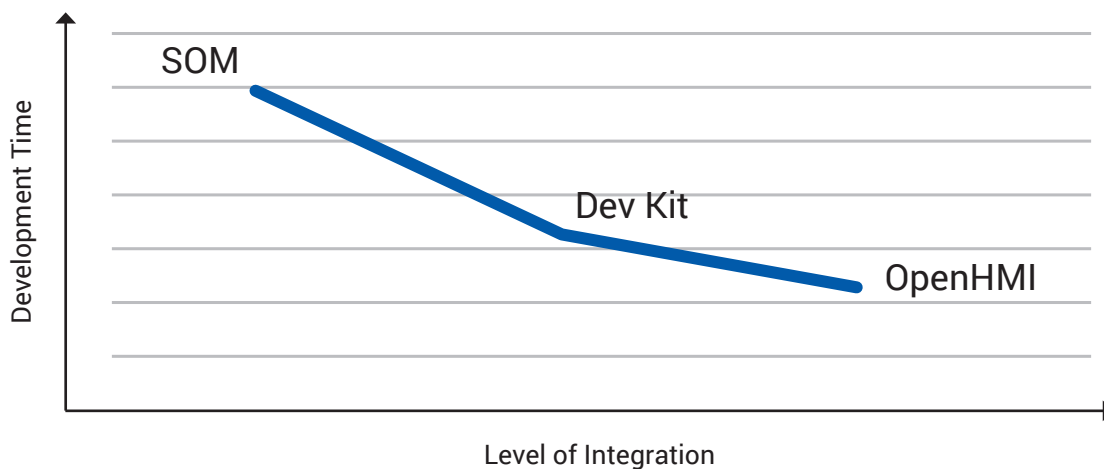
EXOR Embedded concentrates in Embedded Computer Systems based on ARM architecture which are used in many different professional environments. As one of the most innovative suppliers in the field, we offer our customers know-how and expertise in the areas of:

- electronic system development with BSP, Linux, Yocto and Codesys,
- system integration with support for protocol integration and cloud connectivity, and,
- the production of final almost-finished electronic products.



As a spin off from EXOR International we have nearly 50 years of experience and acquired expertise from a multitude of successfully completed projects in the industrial, marine, automotive and building sectors. Some of the products developed by us have been working in industrial environments for decades proving both the longevity of support and the resilience of design.

One of our strengths is our own specialized in-house production. Over 50,000 electronic units are produced, tested and shipped here annually to a global audience. The finished products of EXOR International provides EXOR Embedded with further understanding of the challenges faced in the industrialization of final products. This expertise along the entire development cycle allow us to assist in the optimization of your production line.



The EXOR Embedded **SOM series** offer great performance, space and cost saving array of products. The SOM catalog is constantly expanded and updated with new versions based on the latest ARM, x86 and FPGA processors to guarantee our customers the possibility of creating competitive and performing product. High computing power and economy of space is a special feature of the design. They offer the possibility to place them in compact devices.

Development kits for all the SOMs enable software development to begin immediately, even if the final hardware design has not yet been decided upon. All common interfaces of the relevant processor are available on the baseboard, so that a complete software development can be performed. Connectivity to Corvina cloud is included. Once the development is complete, the relevant SOM can be integrated quickly and easily into your own hardware.

EXOR Embedded also offers its customers open-frame or semi-assembled carrier boards such as the new **OpenHMI kits**. These consist of a single board computer based on nanoSOM connected to a display and touch. OpenHMI technologies guarantee the best time to market for our customers who can integrate our HW directly into their product. Included is a special version of the industrial respected JMobile connectivity and visualization software as well as connection to the industrial cloud, Corvina Cloud as well as other third party cloud services. Available in different configurations, the products of the OpenHMI family are ideal for the realization of HMI systems and for the development of industrial minipc for the collection and transmission of data from the field to the cloud, smart IoT gateway PC.

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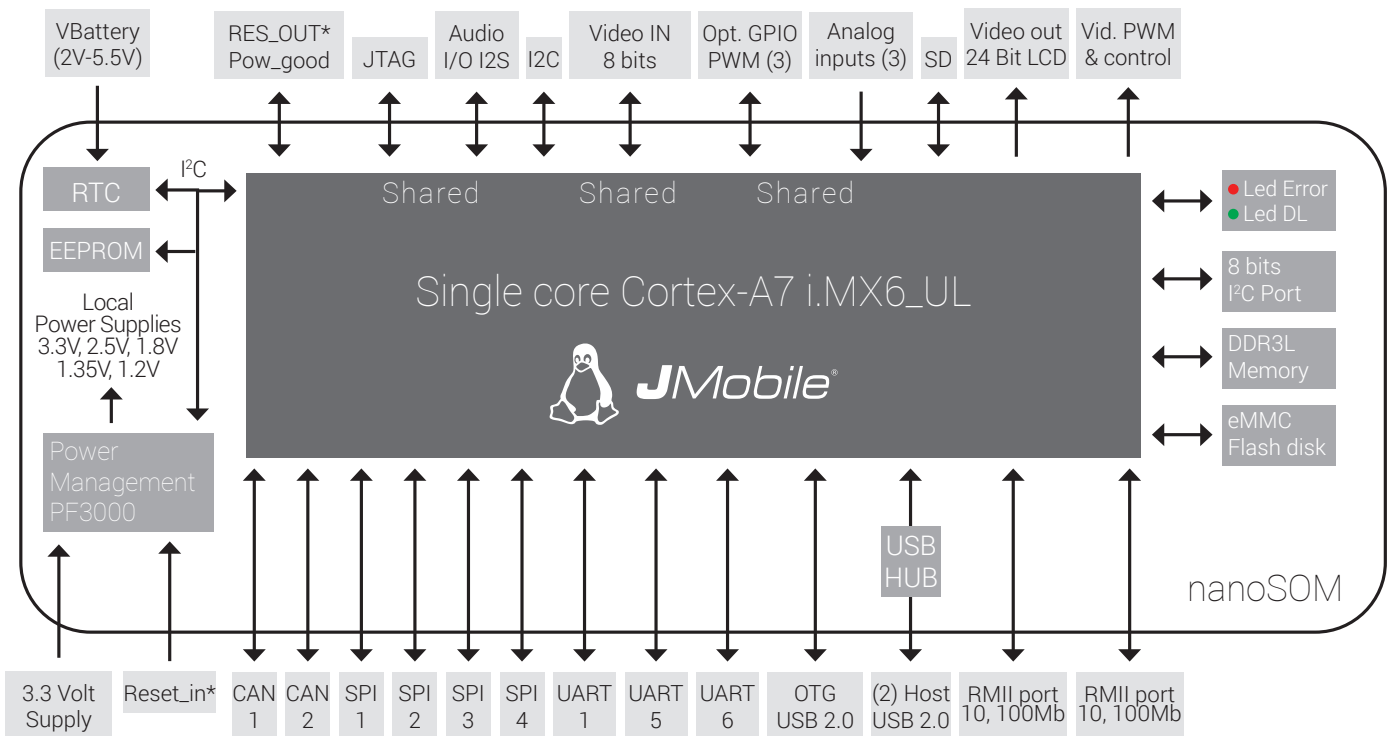
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nanoSOM nS01 - Technical Data



NanoSOM nS01 is highly innovative, high performance very efficient, ultra compact and cost-effective SOM based i.MX6 UltraLite CPU ARM Cortex-A7 core.

Dimensions	25,4x25,4 mm
Temperature Range	Commercial 0 to +70°C / Industrial -40 to +85°C
CPU	NXP i.MX6 UltraLite 528 Mhz - ARM Cortex-A7 MPCore with TrustZone and NEON Media Processor unit.
DDR	Up to 1 GByte high performance DDR3L
Flash Disk	Up to 32 GByte eMMC Flash
EEPROM	512 Bytes x 8
RTC	Yes, Battery or SuperCAP backup
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0), 1 (OTG)
Ethernet	2 (RMII ports 10/100Mb MAC IEEE1588)
SD	1 (via External connectors)
SPI	4
I2C	1
CAN	2
UARTs	3
Audio	1 (I2S Channel)
Video	24 bits RGB LCD parallel / Optional Video Input Port 8 bits (shared with some peripherals)
Analog Input / GPIO	3 Analog Inputs and several programming GPIO signals with interrupt capability (2 PWM). Reserved Pins for Power-Fail, Power Good, Reset IN, Reset Out functions.
Security	Optional Advanced Security functions ARM TrustZone with optional 10 Tamper pads
Power Supply	Single 3,3 Volt / VBB for RTC Backup



Ordering Information

Model	Part Number	Description
nS01-0001	+NS01-0001	i.MX6 UltraLite 528Mhz - 256MB DDR3L - 4GB Flash Disk - Operating Temp. 0 to +70°C
nS01-0002	+NS01-0002	i.MX6 UltraLite 528Mhz - 512MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C
nS01-0003	+NS01-0003	i.MX6 UltraLite 528Mhz - 512MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C - Advance Security
nS01-0004	+NS01-0004	i.MX6 UltraLite 528Mhz - 1GB DDR3L - 8GB Flash Disk - Operating Temp. -40 to +85°C
nS01 Dev. Kit	+EE16EK-0005	nanoSOM nS01 Development Kit

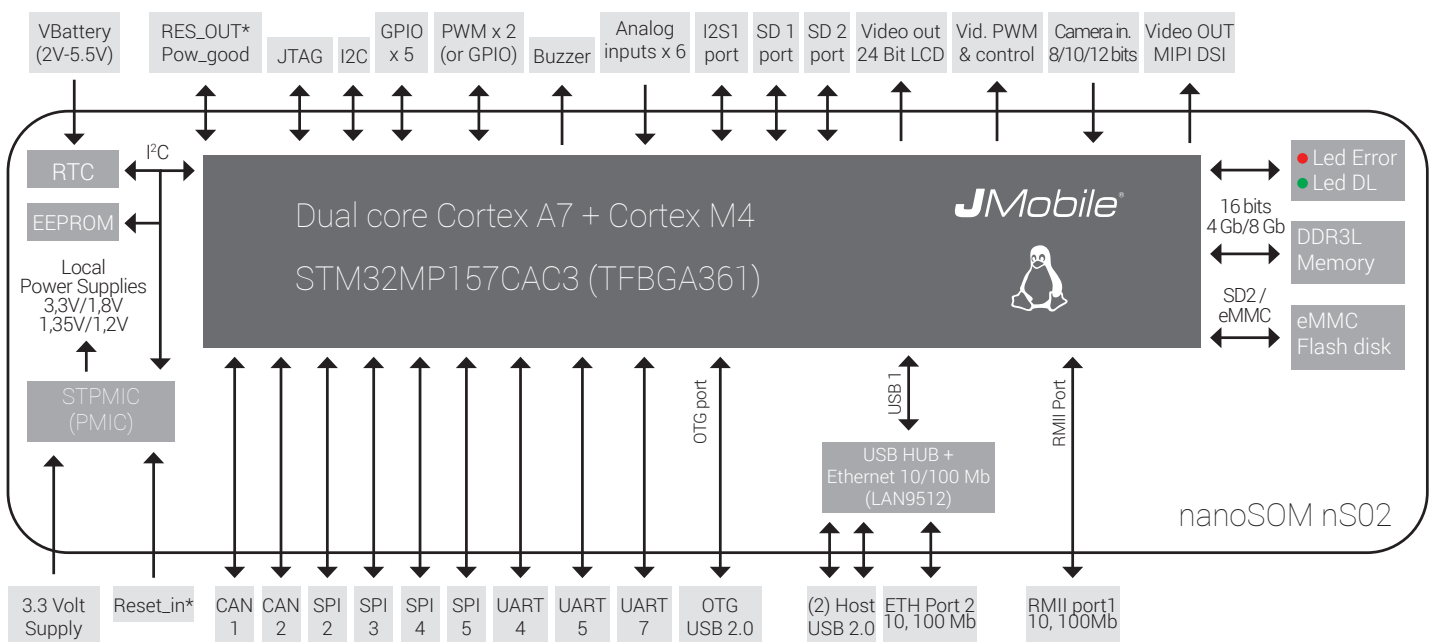
Optionally available with different configurations, with different CPU part number, memory sizes and Operating Temperature grades.

nanoSOM nS02 - Technical Data



NanoSOM nS02 is highly innovative, high performance very efficient, ultra compact and cost-effective SOM based at Dual Cortex -A7 plus M4 MPU with 3D GPU.

Dimensions	25,4x25,4 mm
Temperature Range	Commercial 0°C to 70°C / Industrial -40°C to +85°C
CPU	STM32MP157 at 650 Mhz Dual Cortex-A7 plus M4 MPU with 3D GPU.
DDR	Up to 1 GByte high performance DDR3L
Flash Disk	Up to 32 GByte eMMC Flash
EEPROM	512 Bytes x 8
RTC	Yes, Battery or SuperCAP backup
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0), 1 (OTG)
Ethernet	1 (RMII 10/100Mb MAC IEEE1588) and 1 (10/100Mb Direct Line Interface)
SD	2 (via external connectors)
SPI	4
I2C	1
CAN	2
UARTs	3
Audio	1 (I2S Channel)
Video out/Video in	24 bits RGB LCD parallel or 2 lane MIPI DSI Video Input Port (camera port) 8,10,12 Bit
Analog Inputs / GPIO	More Analog Inputs and several programming GPIO signals with interrupt capability. Reserved Pins for Power-Fail, Power Good, Reset IN, Reset Out functions.
HW security	Secure boot, Trust Zone IPs
Power Supply	Single 3,3 Volt / VBB for RTC Backup

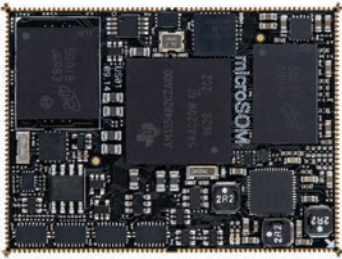


Ordering Information

Model	Part Number	Description
nS02-0001	+NS02-0001	STM32MP157 650Mhz - 256MB DDR3L - 4GB Flash Disk - Operating Temp. 0 to +70°C
nS02-0002	+NS02-0002	STM32MP157 650Mhz - 512MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C
nS02-0003	+NS02-0003	STM32MP157 650Mhz - 512MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C - Advance Security
nS02-0004	+NS02-0004	STM32MP157 650Mhz - 1GB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C
nS02 Dev. Kit	+EE16EK-0009	nanoSOM nS02 Development Kit

Optionally available with different configurations, with different CPU part number, memory sizes and Operating Temperature grades.

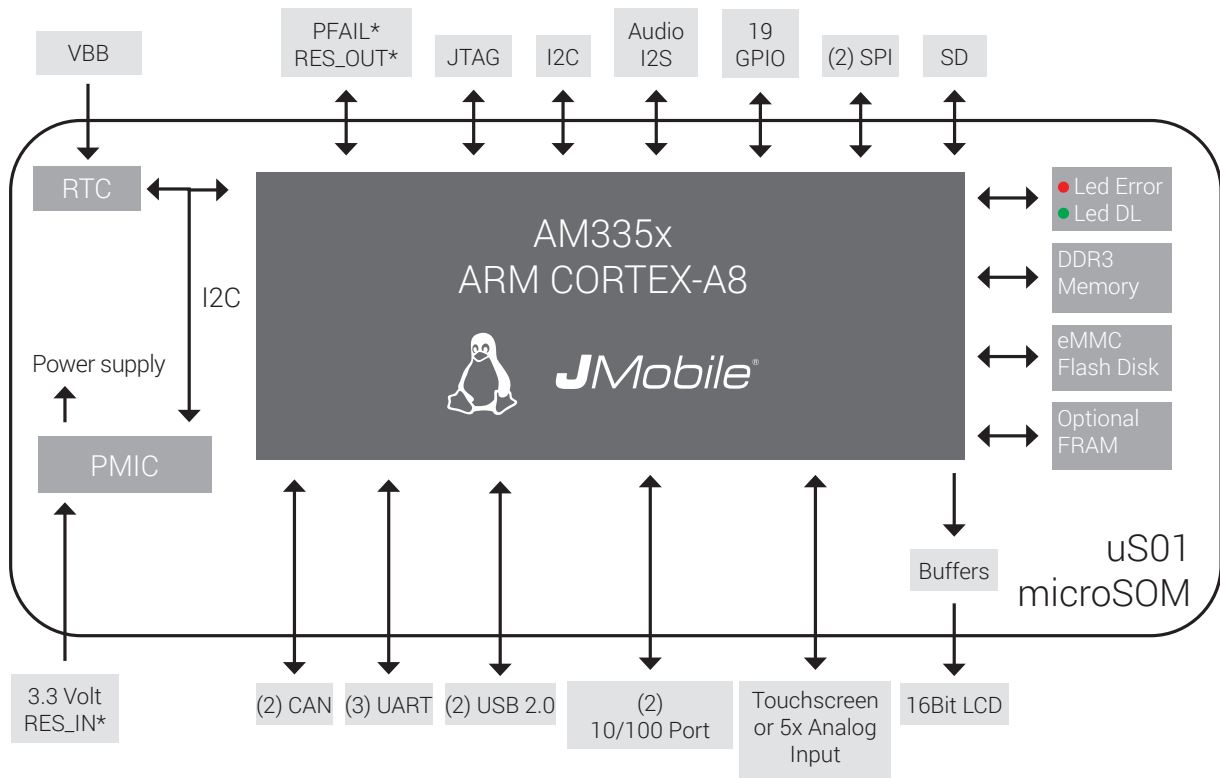
microSOM uS01 - Technical Data



microSOM uS01, TI's Sitara ARM-Cortex-A8 based microSOM standard, for the increased system performance requirements.

Dimensions	46x35 mm
Temperature Range	-40°C to +85°C
CPU	TI Sitara AM3352/AM3354 up 1 GHz
DDR	Up 512 Mbytes DDR3
Flash Disk	Up to 4 Gbytes eMMC (The actual size could vary according to the device's vendor. 2MB min. of boot sectors.)
EEPROM	4 Kbits
FRAM	64 Kbytes (optional)
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0)
Ethernet	2 (RMII ports 10/100 Mb)
SD	1
Serial Port	3*
SPI	2
I2C	1
CAN	2*
Audio	1 (I2S Channel)
Video	1 (Video Out Controller 16 Bit)
Analog Input	5
GPIO	19

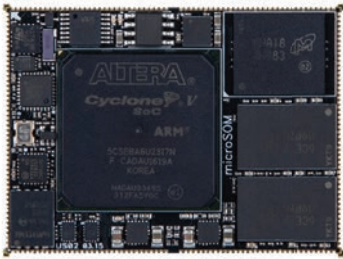
Software configurable. Not all selections can be combined
 * One UART shared with one CAN



Ordering Information

Model	Part Number	Description
uS01-0001	+US01-0001	TI Sitara AM3354 1Ghz - 512MB DDR3 - 4 GB Flash Disk - Operating Temp. -40 to +85°C
uS01-0002	+US01-0002	TI Sitara AM3352 300Mhz - 256MB DDR3 - 2 GB Flash Disk - Operating Temp. -40 to +85°C
uS01-0003	+US01-0003	TI Sitara - AM3354 1Ghz - 512MB DDR3 - 4 GB Flash Disk - Operating Temp. 0 to +70°C
uS01-0004	+US01-0004	TI Sitara AM3352 300Mhz - 256MB DDR3 - 2 GB Flash Disk - Operating Temp. 0 to +70°C
uS01 Development Kit	+EE16EK-0002	microSOM uS01 Development Kit

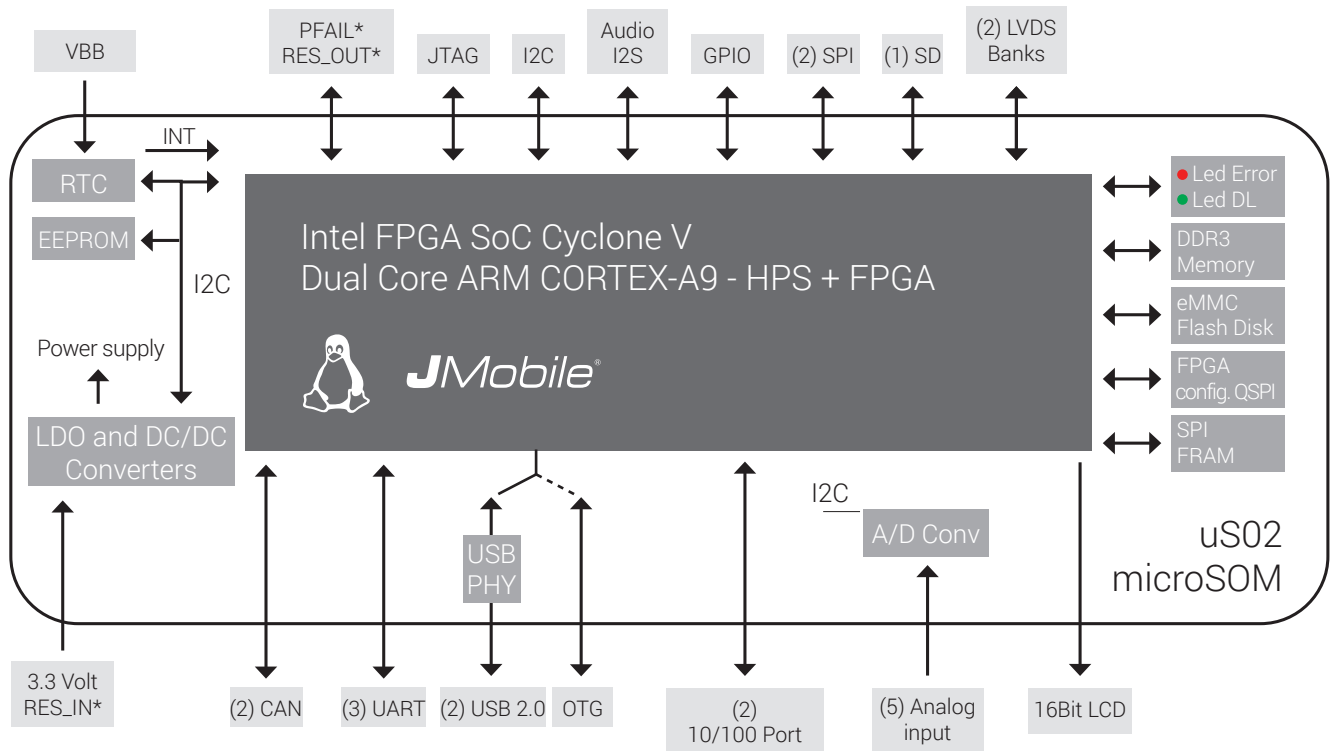
microSOM uS02 - Technical Data



microSOM uS02 Intel Cyclone V SE SoC based new microSOM standard for the increased system performance requirements.

Dimensions	46x35 mm
Temperature Range	-40°C to +85°C
CPU	Intel 5CSEBA2 (A6) Dual ARM Cortex - A9 925 MHz
Integrated with FPGA up to 110K LEs	25/110 KLE
DDR	1 Gbyte DDR3
Flash Disk	Up to 4 Gbytes eMMC (The actual size could vary according to the device's vendor. 2MB min. of boot sectors.)
QSPI	Up to 256 Mbits
EEPROM	4 Kbits
FRAM	64 Kbytes
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0) or 1 (OTG)
Ethernet	2 (RMII ports 10/100 Mb)
SD	1
Serial Port	3
SPI	2
I2C	1
CAN	2
Audio	1 (I2S Channel)
Video	(1) Video Out Controller 16 Bit - Video Input: Digital Interface ITU656
Analog Input	5
GPIO	Several GPIO available depending of FPGA configuration, 2 LVDS I/O with 5 lanes each

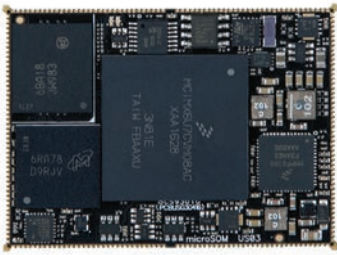
Software configurable. Not all selections can be combined



Ordering Information

Model	Part Number	Description
uS02-0001	+US02-0001	Cyclone V SoC - 110 KLE - 1GB DDR3 - 4 GB Flash Disk - Operating Temp. -40 to +85°C
uS02-0002	+US02-0002	Cyclone V SoC - 25 KLE - 1GB DDR3 - 4 GB Flash Disk - Operating Temp. -40 to +85°C
uS02 Dev. Kit	+AL15EK-0001	microSOM uS02 Development Kit

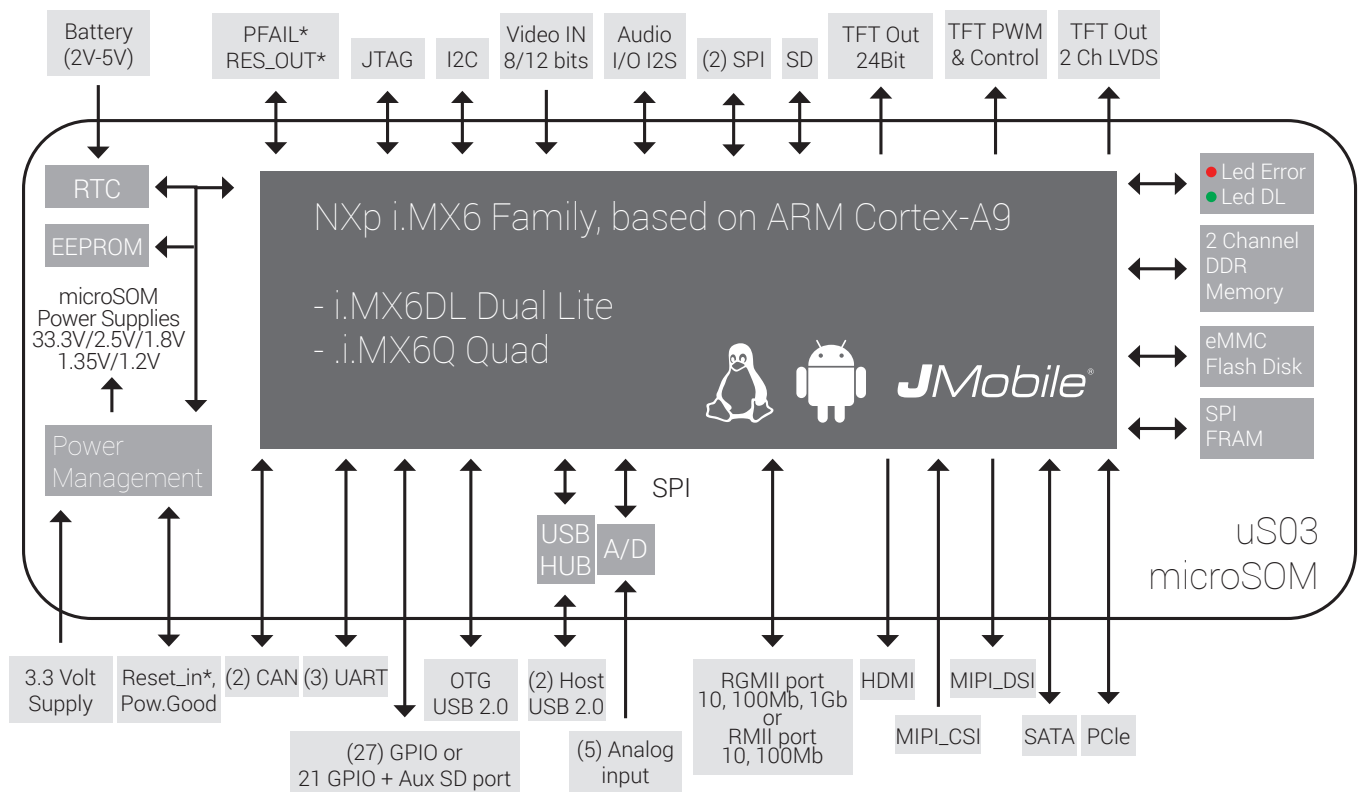
microSOM uS03 - Technical Data



uS03 is highly innovative, high performance i.MX 6 Quad/ Dual/DualLite/Solo core ARM Cortex-A9 of microSOM family. The uS03 microSOM solution ideal for applications requiring multimedia capabilities and/or high levels of parallel computing.

Dimensions	46x35 mm
Temperature Range	-40°C to +85°C
CPU	i.MX6S Solo up to 800 MHz, i.MX6DL DualLite up to 800 MHz, iMXD Dual up to 800 MHz, i.MX6Q Quad up to 800 MHz
DDR	Up to 2 GBytes high performance LVDDRAM2 Dual Channel mode (2x32 bit)
Flash Disk	Up to 8 Gbytes eMMC
EEPROM	4 Kbits
FRAM	64-Kbytes (optional)
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0), 1 (OTG)
Ethernet	1 (RMII 10/100 Mb) or 1 (RGMII 10/100/1000 Mb)
SD	2
Serial Port	3
SPI	2
I2C	1
CAN	2
Audio	1 (I2S Channel)
Video OUT	1 (Video Out Controller 24 Bit), 1 (Video Out LVDS Dual Ch. or 2 Single Channel), 1 (HDMI 1.4), 1 (MIPI DSI)
Video IN	1 (Camera int. MIPI CSI), 1 (Camera parallel input up to 12 bits)
Analog Input	5
GPIO	27
PCIe	GEN1 (2,5 Gbps)

Software configurable. Not all selections can be combined



Ordering Information

Model	Part Number	Description
uS03-0001	+US03-0001	i.MX6S DualLite 800Mhz - 1GB DDR - 4GB Flash Disk - Operating Temp. -40 to +85°C
uS03-0002	+US03-0002	i.MX6S Quad 800Mhz - 2GB DDR - 8GB Flash Disk - Operating Temp. -40 to +85°C
uS03 Kit	+EE16EK-0001	microSOM uS03 Development Kit

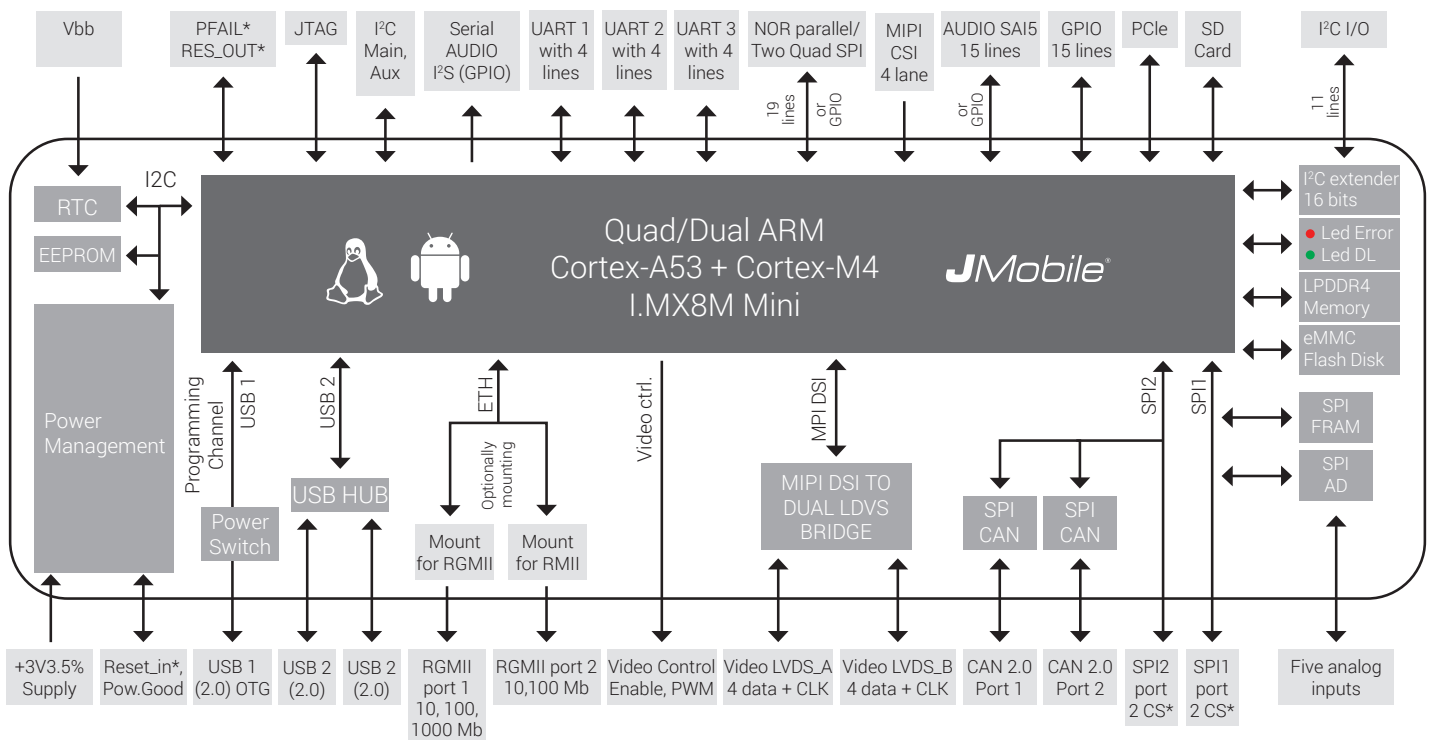
microSOM uS04 - Technical Data



microSOM uS04 is highly innovative, high performance module, based at i.MX8M mini family, that is one ideal successor of well known i.MX6. This family incorporates quad/dual Arm® Cortex®-A53, with addition one Cortex-M4 core.

Dimensions	46x35 mm
Temperature Range	-40°C to 85°C
CPU	i.MX8M Mini Quad/Dual ARM Cortex-A53 at 1.6 Ghz
DDR	LPDDR4 x32 @ 3000 MT / 2 GB
Flash Disk	eMMC 5.0, up to 32 GB on board
EEPROM	I²C, 4 Kbits
FRAM	64 Kbytes
External memory (*)	Direct support for NOR parallel flash or 2 QSPI or additional eMMC/SD interface (in case of using must be mounted at external carrier board)
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	1 (OTG 2.0), 2 (Host 2.0)
Ethernet	US04-0001 and US04-0003: 1 (RMII port 10/100 Mb) US04-0002 and US04-0004: 1 (RGMII port 10/100/1000 Mb)
SD	Yes, via external connector
Serial Port	3 UARTS (4 lines)
SPI	2 channels with two CS*
I²C	2
CAN	2 using onboard SPI/CAN bridges
Audio	1 (I2S), 1 (Generic audio channel with 15 signals)
Video out	1 Video Out LVDS Single or dual Channel
Video in	1 (MIPI CSI 4 lanes)
GPIO	15 signals from CPU and 13 signals from on board I2C extenders
Analog input	5 single ended channels, 12bits, 1V8 Max
PCIe	Single lane, GEN1, GEN2

* Software configurable. In case of not using some special interface all pins can be used as GPIO



Ordering Information

Model	Part Number	Description
uS04-0001	+US04-0001	i.MX8M Mini Quad ARM Cortex-A53 1.6 GHz - 2 GB LPDDR4 - 8GB - RMII - Operating Temp. -40 to +85°C
uS04-0002	+US04-0002	i.MX8M Mini Quad ARM Cortex-A53 1.6 GHz - 2 GB LPDDR4 - 8GB - RGMII - Operating Temp. -40 to +85°C
uS04-0003	+US04-0003	i.MX8M Mini Dual ARM Cortex-A53 1.6 GHz - 2 GB LPDDR4 - 8GB - RMII - Operating Temp. -40 to +85°C
uS04-0004	+US04-0004	i.MX8M Mini Dual ARM Cortex-A53 1.6 GHz - 2 GB LPDDR4 - 8GB - RGMII - Operating Temp. -40 to +85°C
uS04 Dev. Kit	+EE16EK-0013	microSOM uS04 Development Kit

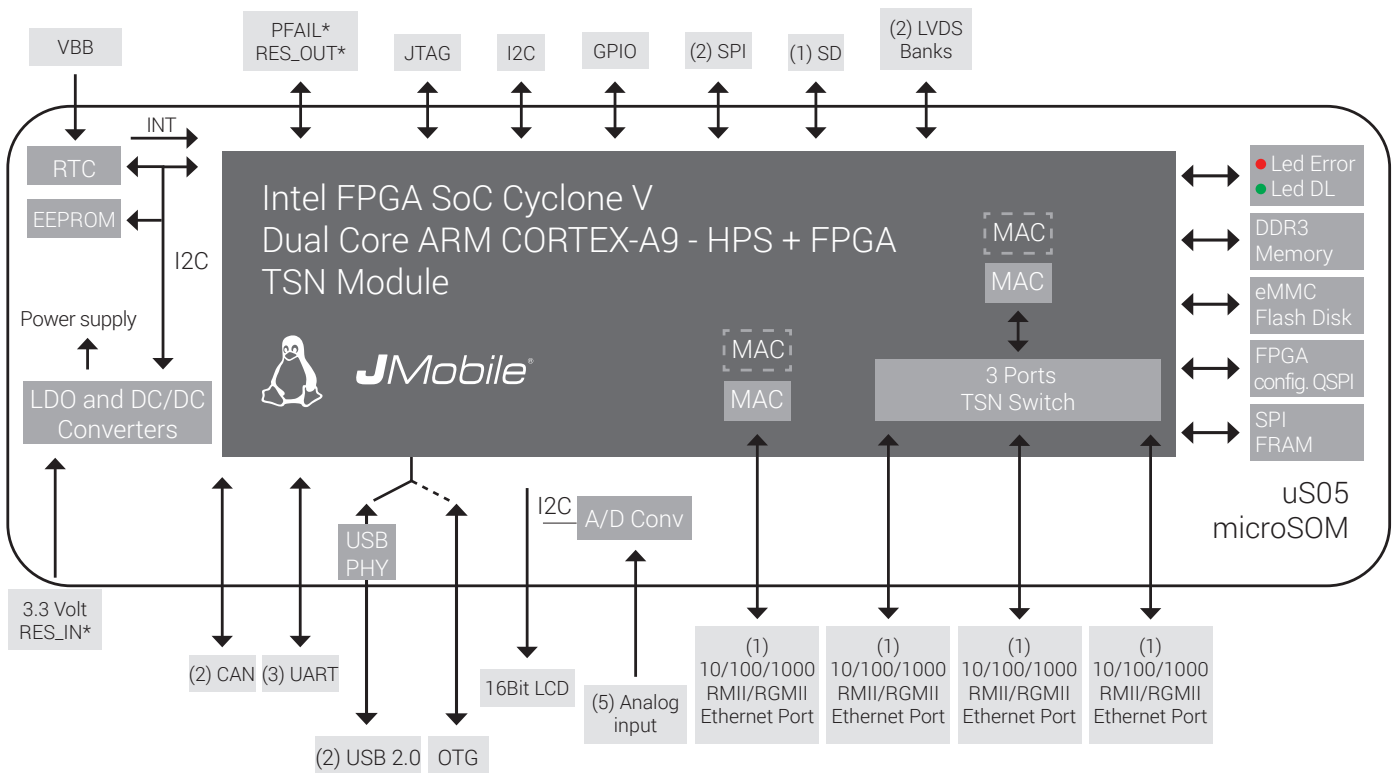
microSOM uS05 TSN Version - Technical Data



microSOM uS05 Intel FPGA now support new Time-Sensitive Networking (TSN) mechanisms. Devices using this product have successfully completed interoperability tests in the renowned Industrial Internet Consortium TSN testbed.

Dimensions	46x35 mm
Temperature Range	-40°C to +85°C
CPU	Intel 5CSEBA6 Dual ARM Cortex - A9 925 MHz Integrated with FPGA 110 KLE
DDR	1 Gbyte DDR3
Flash Disk / QSPI	4 GByte eMMC / 256 Mbits
EEPROM	4 Kbits
FRAM	64-Kbytes
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0) or 1 (OTG)
Ethernet	4 (RGMII 10/100/1000 Mb Ethernet MAC)
TSN	3 Ports Ethernet TSN Switch (RGMII)
SD	1
Serial Port	3
SPI	2
I2C	1
CAN	2
Video	1 (Video Out Controller 16 Bit)
Analog Input	5
GPIO	Several GPIO available depending of FPGA configuration, 2 LVDS I/O with 5 lanes each

Software configurable. Not all selections can be combined



Ordering Information

Model	Part Number	Description
uS05-0001	+US05-0001	Cyclone V SoC - 110 KLE - 1GB DDR3 - 4 GB Flash Disk - TSN Support - Operating Temp. -40 to +85°C
uS05 TSN Kit	+EE16EK-0008	microSOM uS05 Development Kit

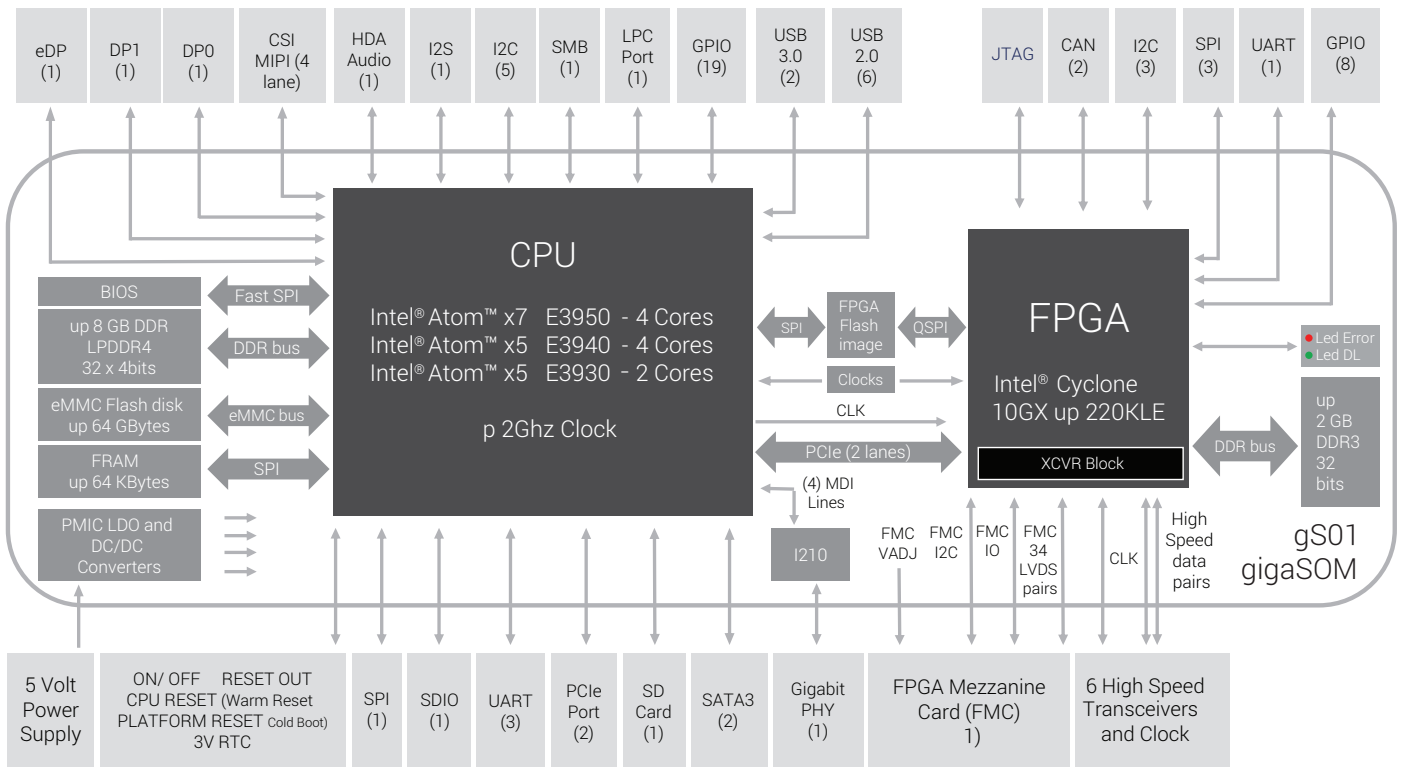
gigaSOM gS01 - Technical Data



GigaSOM gS01 is highly innovative, high performance very efficient, ultra compact SOM, based at Atom E39xx Intel® CPU cores and Intel® Cyclone 10 GX FPGA.

Dimensions	81,6 x 54 x 4,9 mm
Temperature range	-40°C to +85°C
Power supply	5V,+ 5%, current (TBD)
CPU	Intel® Atom E39XX Quad or Dual cores
FPGA	Intel® Cyclone 10 GX up to 220 KLE
DDR	LPDDR4 up to 8 Gbytes for CPU and DDR3 up to 2 GBytes for FPGA
Flash memory	Up to 64 Gbytes eMMC Flash for CPU, 1 Gbytes QSPI Flash for FPGA
FRAM	64 Kbytes via CPU side
Video out interfaces	eDP, DP0 and DP1 via CPU side
Video in interfaces	CSI MIPI via CPU side (4 lanes)
Audio	HDA and I2S via CPU side
CPU high speed interfaces	6 (USB 2.0), 2 (USB 3.0), 2 (SATA3), 1 (Gigabit Ethernet), PCIe (1 lane), PCIe (2 lane)
CPU low speed interfaces	SMB bus, 5 (I2C), 3 (UART), SPI, LPC, SDIO, SD card, GPIO
FPGA high speed interfaces	34 LVDS pairs plus six 10Gb transceivers (support for FMC LPC and LPC+)
FPGA low speed interfaces	2 (CAN), 3 (SPI), 2 (I2C), 1 (UART), 1 (GPIO)
Interface CPU-FPGA	Dual Lane Gen 2 PCIe
FPGA image	Configurable via CPU

Software configurable. Not all selections can be combined



Ordering Information

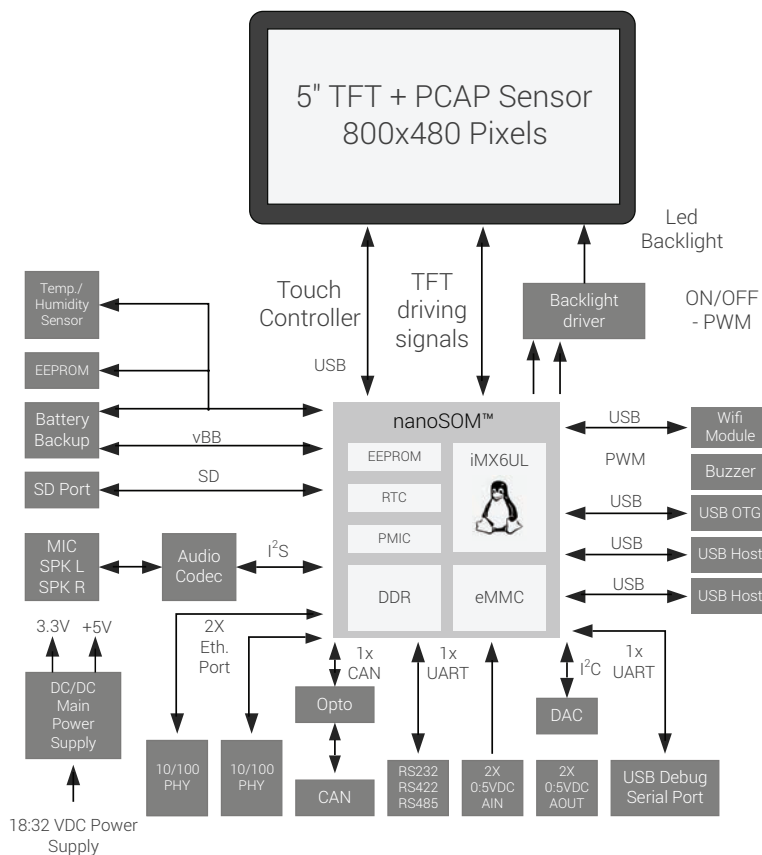
Model	Part Number	Description
gS01-0001	+GS01-0001	Intel® Atom E3930 - 4GB LPDDR4 - 32GB Flash Disk - Operating Temp. -40 to +85°C
gS01-0002	+GS01-0002	Intel® Atom E3940 - 8GB LPDDR4 - 64GB Flash Disk - Operating Temp. -40 to +85°C
gS01-0003	+GS01-0003	Intel® Atom E3930 - 4GB LPDDR4 - 32GB Flash Disk - Cyclone 10GX 85KLE - Operating Temp. -40 to +85°C
gS01-0004	+GS01-0004	Intel® Atom E3940 - 8GB LPDDR4 - 64GB Flash Disk - Cyclone 10GX 220KLE - Operating Temp. -40 to +85°C
gS01 Dev. Kit	+EE16EK-0011	gigaSOM gS01 Development Kit

5" OpenHMI nS01 Development Kit - Technical Data



OpenHMI nS01 is innovative embedded intelligent IoT controller based nS01 i.MX 6 UL ARM Cortex-A7 of nanoSOM module and it is fully integrated with high resolution 5 inch TFT 800x480 including high reliability Projective Capacitive Touch screen sensor.

CPU	
CPU Type	iMX.6UL
Core Class	Single Core Cortex-A7 528Mhz
RTC	30 ppm @25°C – Batt. backup
Memory	
eMMC	4GByte
RAM	512MByte DDR
EEPROM	4KBits
SD Card Slot	1 (Standard SD card)
Operating System	
Supported OS	Linux Yocto
Comm. Interfaces	
Ethernet	2 (10/100 Mb)
Wifi	802.11 a/b/g/n (2.4 - 5 GHz)
USB 2.0	1 (USB OTG) + 2 (USB Host)
CAN Fieldbus	1 (CAN (isolated))
Serial Port	1 (RS232/RS422/RS485)
SPI / I2C	2 (SPI) / 1 (I2C) / Serial TTL / I/O Connector
Audio	
Audio Interface	MIC/SPKL-SPKR 3.5mm Headset connector + Buzzer
Display and Touch	
Size	5"
Resolution	800x480
Brightness	300 cd/m2
Backlite Lifetime	Typ. 30.000 h.
Colors	16 bit
Touch	PCAP - Multitouch Controller
I/O	
Analog Input	2 (0 to 5 VDC)
Analog Output	2 (0 to 5 VDC)
Mechanical	
Cover Glass	Optional
Dim. / Thickness	121x76x38 mm
Power Supply	
Supply voltage	18 to 32 VDC
Consumption	Typ. 5W
Operating Conditions	
Operating Temp. / Hum.	-20 to +60°C / 5 to 90% RH
Storage temp	-30 to +85°C



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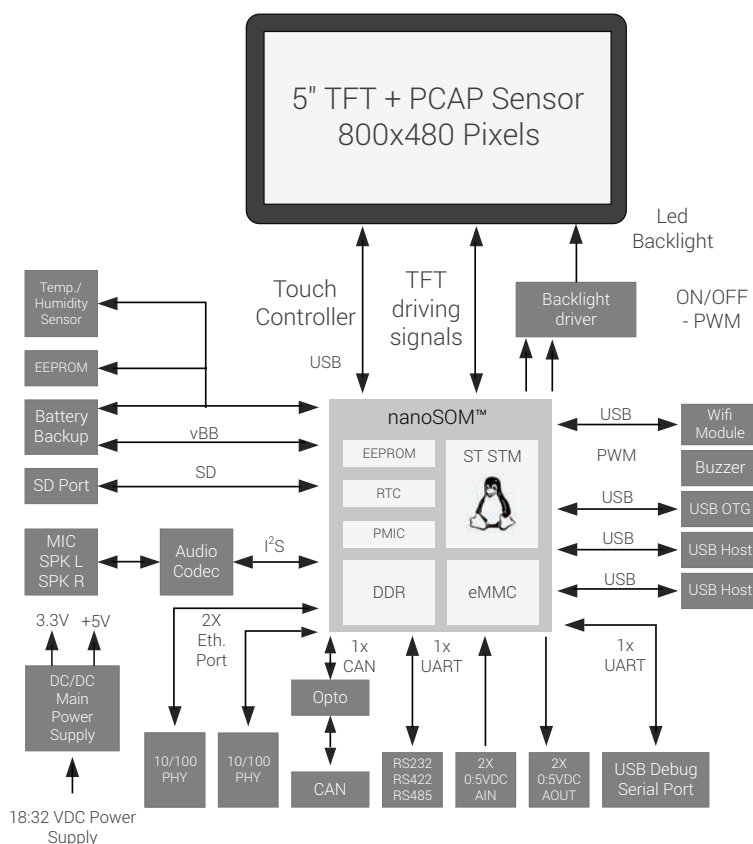
Model	Part Number	Description
5" OpenHMI nS01 Development Kit	+EE16EK-0007	i.MX6UL - Industrial 20°C to +60°C - 528Mhz - 512MByte DDR - 4GByte Flash disk - 4Kbits EEPROM

5" OpenHMI nS02 Development Kit - Technical Data



OpenHMI nS02 is innovative embedded intelligent IoT controller based nS02 STM32MP157CAC3 Dual ARM Cortex-A7 plus M4 MPU with 3D GPU and it is fully integrated with high resolution 5 inch TFT 800x480 including high reliability Projective Capacitive Touch screen sensor.

CPU	
CPU Type	STM32MP157CAC3
Core Class	Dual Cortex -A7 plus M4 MPU with 3D GPU
RTC	30 ppm @25°C – Batt. backup
Memory	
eMMC	4 GB
RAM	512 MByte DDR
EEPROM	4 KBits
SD Card Slot	1 (Standard SD card)
Operating System	
Supported OS	Linux Yocto
Comm. Interfaces	
Ethernet	2 (10/100 Mb)
Wifi	802.11 a/b/g/n (2.4 - 5 GHz)
USB 2.0	1 (USB OTG) + 2 (USB Host)
CAN Fieldbus	1 (CAN (isolated))
Serial Port	1 (RS232/RS422/RS485)
SPI / I2C	2 (SPI) / 1 (I2C) / Serial TTL / I/O Connector
Audio	
Audio Interface	MIC/SPKL-SPKR 3.5mm Headset connector + Buzzer
Display and Touch	
Size	5
Resolution	800x480
Brightness	300 cd/m2
Backlite Lifetime	Typ. 30.000 h.
Colors	16 bit
Touch	PCAP - Multitouch Controller
I/O	
Analog Input	2 (0 to 5 VDC)
Analog Output	2 (0 to 5 VDC)
Mechanical	
Cover Glass	Optional
Dim. / Thickness	121x76x38 mm
Power Supply	
Supply voltage	18 to 32 VDC
Consumption	Typ. 5W
Operating Conditions	
Operating Temp. / Hum.	-20°C to +70°C / 5 to 90% RH
Storage temp	-30°C to +80°C



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Ordering Information

Model	Part Number	Description
5" OpenHMI nS02 Development Kit	+EE16EK-0009	STM32MP157CAC3 - Industrial - 20°C to +70°C - 650 Mhz - 512MByte DDR - 4GByte Flash disk - 4Kbits EEPROM



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IoT Gateways

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eXware Series

The eXware series represents a prudent first step into the implementation of IIoT and Industry 4.0 compatibility. Acting as the **central element in IIoT landscape** the eXware series can communicate between automation devices, cloud, fog and applications.

Through use as a **gateway**, a powerful **HMI**, a **PLC** with CODESYS V3 or a **secure router**, the eXware facilitates data intensive and complex IIoT applications to be enabled.



- Plug and Forget integration into existing infrastructure
- Device data flow easily configured
- JMobile protocols and gateway functions
- JM4web HTML5 interface for web HMI
- CODESYS V3: supports network stacks and local I/O expandability
- Direct OPC UA communications
- Corvina Cloud secure remote connectivity
- Plug-in module for system expansion
- 2 or 3 Ethernet ports for physical separation of the OT and IT networks
- Rugged and Beautiful all metal design
- Wide operating temperature range
- System settings by web browser
- Trusted and secure Linux-based operating system
- Secure HTTPS/TLS encrypted data transmissions
- Mobile Communication via PLCM09 2G/3G modem
- Support for Geo-Localization*
- IoT data distribution via MQTT*

Overview

Acting as the **central element in IIoT landscape** the eXware can communicate between automation devices, cloud, fog and applications.

This central role offers companies the chance to start at a uncomplicated level in IIoT and yet allows enormous future expansion into more complex aspects of Industrie 4.0 as the workforce gains knowledge of this form of digital thread process and control.

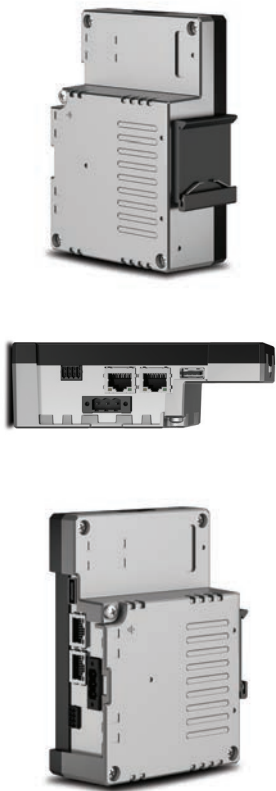
For **maximum security** the physical separation of the OT and IT networks with two ethernet ports has been provided and this avoids simultaneous attacks.

Secure HTTPS/TLS encrypted data transmissions with signed and packet transfer ensures against data theft and eavesdropping.

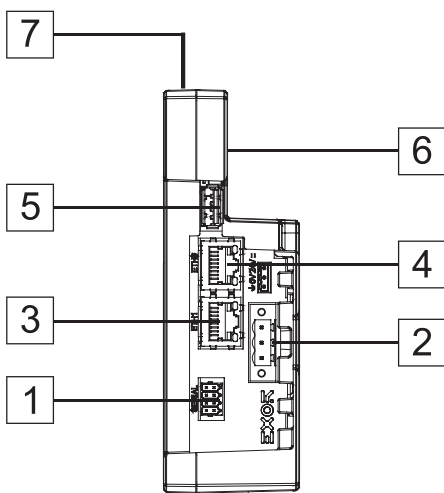
Seamless integration is achieved with the vast library of protocols that is common with JMobile software. Existing installations are easily employed and upgraded when necessary and very little programming skill is needed given the brilliant User Interface of JMobile.

Through use as a **gateway**, a powerful **HMI**, a **PLC** with CODESYS V3 or a **secure router**, the eXware facilitates data intensive and complex IIoT applications to be enabled.

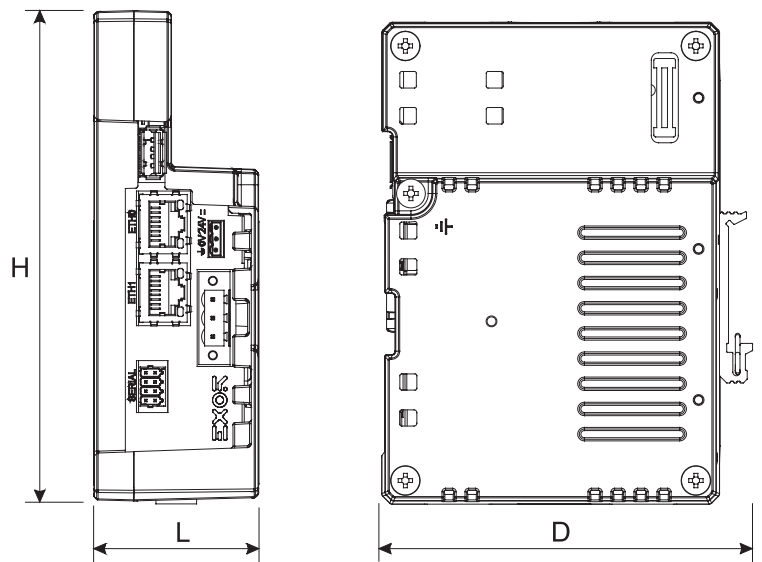
eXware703 - Technical Data



System Resources	
CPU	ARM Cortex-A8 1 GHz
Operating System	Linux RT
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 2 serial ports using plug-in modules.
SD card	Yes
Expansion	1 slot for plug-in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.35 A max. at 24 VDC
Input Protection	Electronic
Battery	Yes
Environment Conditions	
Operating Temp	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing
Protection Class	IP20
Dimensions and Weights	
Faceplate LxH	45x134 mm (1.77x5.27")
Depth D	102 mm (4.01")
Weight	0.6 Kg
Mounting	DIN Rail (TS35)
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments, EN 60945, EMC Emissions and Immunity for marine applications
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2: Ex nA IIC T5 Gc
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc
DNV-GL	Yes
RCM	Yes



- 1 Serial port
- 2 Power supply
- 3 Ethernet port 1 (10/100 Mb)
- 4 Ethernet port 0 (10/100 Mb)
- 5 USB port 1
- 6 Expansion slots for plug-in modules
- 7 SD Card slot



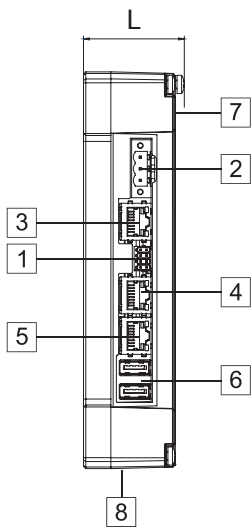
Ordering Information

Model	Part Number	Description
eXware703	+EXW703U0P1	IoT controller and Gateway, 2 Ethernet ports, 1 serial port, 1 USB port

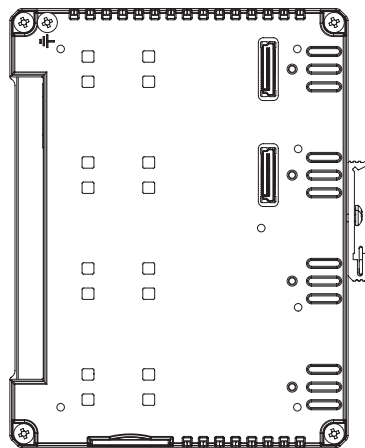
eXware707 - Technical Data



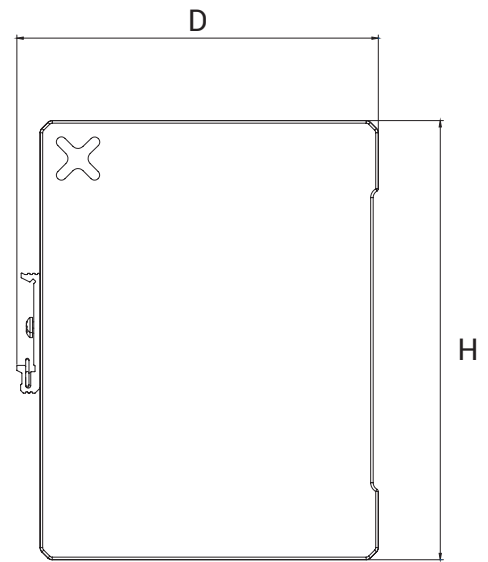
System Resources	
CPU	ARM Cortex-A9 800 MHz dual core
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slots for plug-in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.5 A max. at 24 VDC
Input Protection	Electronic
Battery	Yes
Environment Conditions	
Operating Temp	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing
Protection Class	IP20
Dimensions and Weights	
Faceplate LxH	44 x 174 mm
Depth D	144 mm
Weight	0.7 Kg
Mounting	DIN Rail (TS35)
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments EN 60945, EMC Emissions and Immunity for marine applications
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
DNV-GL	Yes
RCM	Yes



- 1 Serial port
- 2 Power supply
- 3 Ethernet port 0 (10/100/1000 Mb)



- 4 Ethernet port 1 (10/100 Mb)
- 5 Ethernet port 2 (10/100 Mb)
- 6 USB ports 1 and 2



- 7 Expansion slots for plug-in modules
- 8 SD Card slot

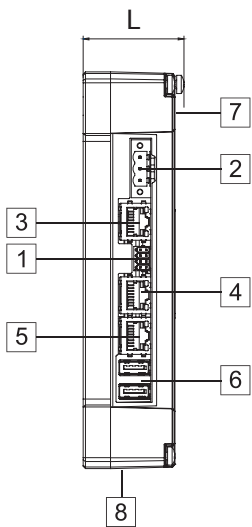
Ordering Information

Model	Part Number	Description
eXware707	+EXW707U0P1	IoT controller and Gateway, dual core CPU, 3 Ethernet ports, 1 serial port, 2 USB ports

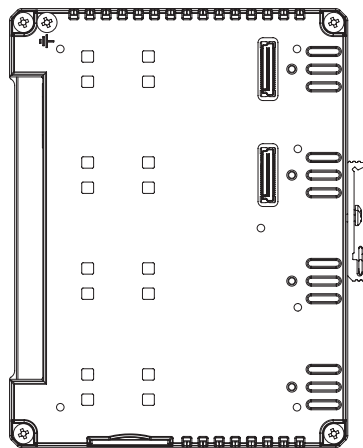
eXware707Q - Technical Data



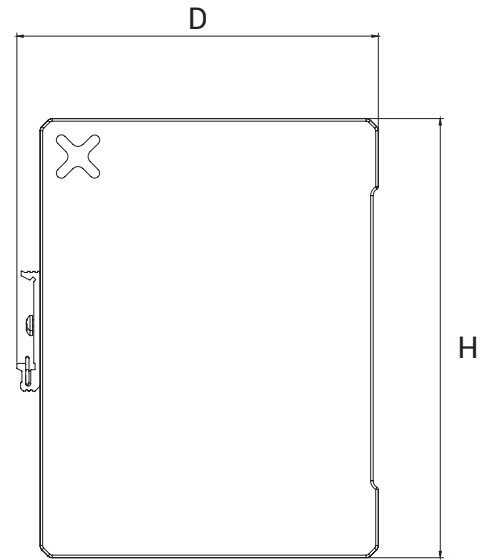
System Resources	
CPU	ARM Cortex-A9 800 MHz quad core
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slots for plug-in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.55 A max. at 24 VDC
Input Protection	Electronic
Battery	Yes
Environment Conditions	
Operating Temp	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing
Protection Class	IP20
Dimensions and Weights	
Faceplate LxH	44 x 174 mm
Depth D	144 mm
Weight	0.7 Kg
Mounting	DIN Rail (TS35)
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments EN 60945, EMC Emissions and Immunity for marine applications
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
DNV-GL	Yes
RCM	Yes



- 1 Serial port
- 2 Power supply
- 3 Ethernet port 0 (10/100/1000 Mb)



- 4 Ethernet port 1 (10/100 Mb)
- 5 Ethernet port 2 (10/100 Mb)
- 6 USB ports 1 and 2



- 7 Expansion slots for plug-in modules
- 8 SD Card slot

Ordering Information

Model	Part Number	Description
eXware707Q	+EXW707QU0P1	High performance IoT controller and gateway, quad core CPU, 3 Ethernet ports, 1 serial port, 2 USB ports



Model	Part Number	Description
PLCM01	+PLCM01U0P1	Plug-in module CAN
PLCM02	+PLCM02U001	Plug-in module KNX/EIB (TP interface)
PLCM03	+PLCM03U0P1	Plug-in module RS-232
PLCM04	+PLCM04U0P1	Plug-in module RS-422/485 with optical insulation
PLCM05	+PLCM05U0P2	Plug-in extender for use with PLIO03/PLIO04 (only for eX705)
PLCM06	+PLCM06U0P1	Plug-in module Profibus DP slave 12 MB
PLCM09	+PLCM09U0P1	Plug-in Wireless Modem
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license
PLIO03	+PLIO03U0P1	I/O Module with 20 DI 24 VDC, 12 DO 24 VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct
PLIO04	+PLIO04U0P1	I/O Module with 10 DI 24 VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100
PLIO06	+PLIO06U0P1	Compact I/O module. 8 DI, 6 DO, 1 Relay Output
PLIO07	+PLIO07U001	Compact I/O module. 2 Relay Outputs

PLCM09 Plug-in Wireless Modem

PLCM09 is a compact and robust plug-in module designed to add Internet connectivity to systems based on eX700 Series and eXware.



- Designed for eX700 and eXware product families.
- Compatible with operation of Corvina Cloud secure service
- 2G/3G wireless communication module
- Worldwide connectivity
- Supports GSM/GPRS/EDGE and UMTS/HSDPA/HSUPA cellular networks
- 2 digital inputs/2 digital outputs (SSR) with optical isolation
- 4 LED indicators (module status and network status)
- microSIM slot accessible by user
- Powered via plug-in connection.
- Plug-in extension connector

Highlights

PLCM09 is a compact and robust plug-in module designed to add Internet connectivity to systems based on eX700 Series and eXware. It is a 2G/3G wireless modem supporting GSM/GPRS/EDGE and UMTS/HSDPA/HSUPA cellular networks.

The device is compatible with operation of EXOR Corvina Cloud secure service.

In combination with Corvina Cloud services you can easily implement basic IIoT functions and establish a VPN to protect access to your devices, streamline connection to cloud services.

Handhelds

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Handheld Series



Secure Mobile HMI in your Hand

The Handheld device range from EXOR is a true HMI in your hand: powerful and easy to program to your needs, they remain the perfect choice for safe mobile requirements.

A specialized section of the market where strict attention must be given to the rigorous safety laws that govern the use of handheld devices.



- Certified Wireless Safety SIL2 (H4)
- JMobile Integrated
- Easy to Program
- Stunning Design/Ergonomics
- Multiple Integrated Keys
- Potentiometers
- Handwheel
- State Selector
- Bluetooth Safety (H4)
- Additional Wi-Fi Connectivity (H4)
- Magnets to Hang Devices in Convenient place
- Up to 20 m connection for the H3

Overview

The wireless option leads to many positive features being enhanced:

- Higher Safety in all areas with no pendant wires to causes issues
- Less injury risks
- No broken cable downtime
- Far less physical fatigue of operator
- Increased concentration of operator

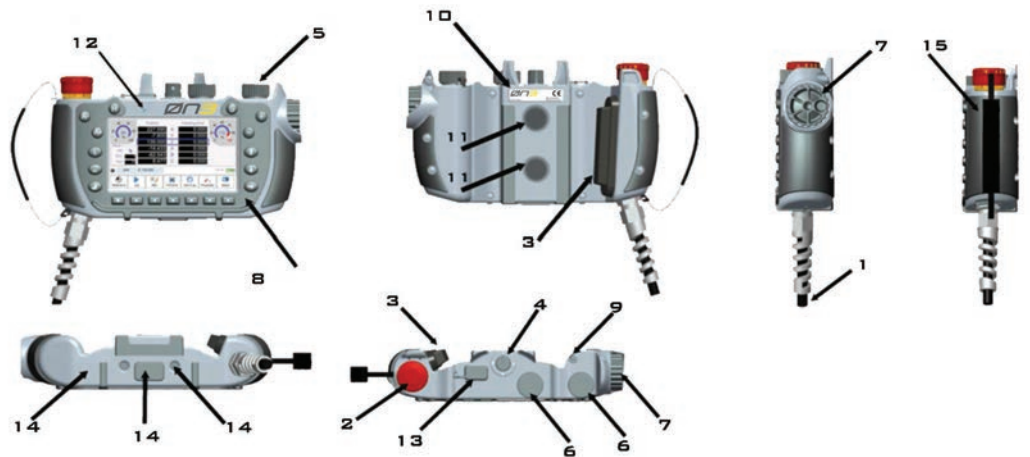
The wireless connection is provided by a Unique electronic key which allows for multiple handheld – machine connections to take place simultaneously without any concern for connectivity and of course safety.

H3 - Technical Data

System Resources	
Display - Colors	TFT LED - 64K
Resolution	480x272
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB
Real Time Clock, RTC Back-up	Yes
Handwheel	Yes (option)
Potentiometer	2
State Selector Switch	16 positions
Emergency stop	Yes, Hardwired
Enabling Switch	Hardwired, 3-positions
Interface	
Ethernet	10/100 Mbit (selected models)
USB port	1 Host V2.0
Serial	1 RS-232, RS-422, RS-485 (selected models)
Ratings	
Power supply (charging station)	24 VDC (18 to 30 VDC)
Current Consumption	0.25 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	+5 to +45°C
Storage Temp	-20 to +70°C
Operating / Storage Humidity	5-95% RH, non condensing
Protection Class	IP64
Dimensions and Weights	
Faceplate LxH	220x130 mm
Depth D+T	50 mm
Weight	Approx 0.8 Kg, (not including cable)
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508 (only +EP3H3REJ2H0YE2, +EP3H3REJ4H0YE2)
RCM	Yes



- 1 Cable
- 2 Emergency stop push-button
- 3 Enabling device
- 4 State Selector
- 5 Screen
- 6 Potentiometers
- 7 Handwheel (Optional)
- 8 Membrane Keypad
- 9 Touchscreen pen
- 10 Sticker
- 11 Mounting magnets
- 12 Status LED's
- 13 Rubber cup for USB
- 14 Protecting covers
- 15 Hand Grip



Ordering Information

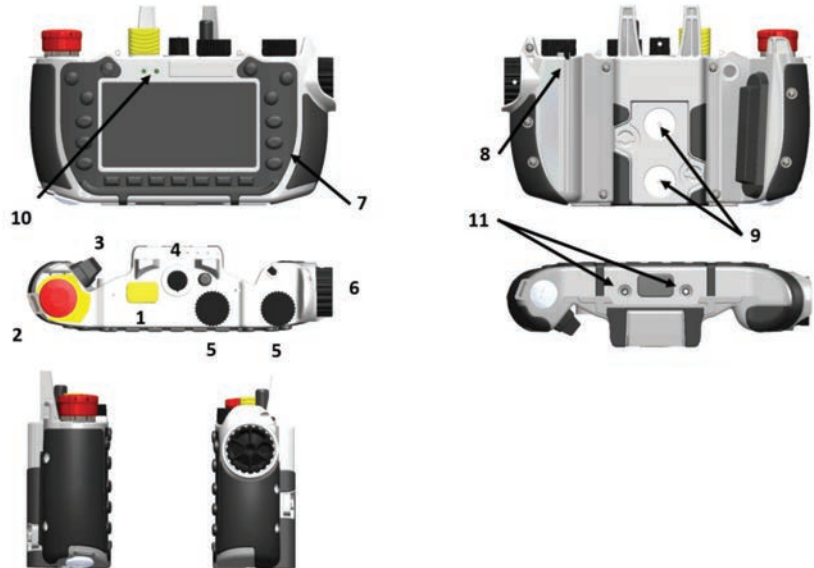
Model	Part Number	Description
H3	+EP3H3REJ200YE1	HMI H3 0N3 Wired 10 m Ethernet JM
H3	+EP3H3REJ400YE1	HMI H3 0N3 Wired 20 m Ethernet JM
H3	+EP3H3REJ2H0YE1	HMI H3 0N3 Wired 10 m Eth+Handwheel JM
H3	+EP3H3REJ4H0YE1	HMI H3 0N3 Wired 20 m Eth+Handwheel JM
H3	+EP3H3RSJ200YE1	HMI H3 0N3 Wired 10 m Serial JM
H3	+EP3H3RSJ2H0YE1	HMI H3 0N3 Wired 10 m Serial+Handwheel JM
H3	+EP3H3REJ2H0YE2	HMI H3 0N3 10 m Eth+Handwheel Circular Connector JM - UL Approval
H3	+EP3H3REJ4H0YE2	HMI H3 0N3 20 m Eth+Handwheel Circular Connector JM - UL Approval
H3	+EP3H00000X0YA2	Connection Box H3 Circular Connector - UL Approval
H3	+EP3H00000B0YA0	Standby Station H3 - Holder for H3

H4 - Technical Data



System Resources	
Display - Colors	TFT LED - 64K
Resolution	480x272
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB
Real Time Clock, RTC Back-up	Yes
Handwheel	Yes
Potentiometer	2
State Selector Switch	16 positions
Emergency stop	Yes
Enabling Switch	3 positions
Interface	
Ethernet	Wi-Fi 802.11
USB port	1 Host V2.0
Bluetooth	Reserved for safety functions
Ratings	
Power supply (charging station)	24 VDC (18 to 30 VDC)
Current Consumption	0.25 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	+5 to +45°C
Storage Temp	-20 to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP64
Dimensions and Weights	
Faceplate LxH	220x144 mm
Depth D+T	63 mm
Weight	Approx 0.8 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
Safety	2006/42/EC, EN ISO 13849-1:2008, EN 62061:2005/A1:2013, EN 60204-1:2006/A1:2009
Safety functions	Emergency Stop cat 3, PL d / SIL 2 Enabling cat 3, PL d / SIL 2 State selector, cat 1, PL c / SIL 1
UL	cULus: UL508

- 1 Token receptacle
- 2 Stop pushbottom
- 3 Enabling device
- 4 State Selector
- 5 Potentiometers
- 6 Handwheel
- 7 Membrane Keypad
- 8 Touchscreen pen
- 9 Mounting magnets
- 10 Status LED's
- 11 Battery Recharging Contacts



Ordering Information

Model	Part Number	Description
H4	+EP4H4SWJ0H0YE0	HMI H4 ON3 Wireless JM
H4	+EP4H00000A0YA0	Antenna + Coupling Token
H4	+EP4H00000R0YA0	Recharging Station H4
H4	+EP4H00005C0YA0	Receiving Station H4

Verticals: Food & Beverage

Sold & Serviced By:



Toll Free Phone (877) SERV098
www.electromate.com
sales@electromate.com

Food & Beverage Series

Where tough legislation requires that handling, preparation, processing and packaging of food is done to be extremely hygienic, the outstanding 7" and 15" Food and Beverage HMI from Exor are the **best choice for manufacturer and final consumer**.

No other company offers such specialized solutions to the everyday problems faced in the Food and Beverage industry and in **particular the meat processing sector**.



- Extensive Guarantee despite no Protective Casing
- Ease of Cleaning
- Real World IP69 Rating
- Glass Strength with Polyester Coating
- High Pressure 80°C Water Resistant
- Perfect Stainless Steel Bezel Design
- Acid Chemical Resistant
- Food Compliant Gasket
- Front panel and gasket guidelines:
 1. DIN EN1672-2
 2. EHEDG / FDA 21 CFR 177.2006

Overview

The food & beverage and pharmaceutical sectors are very different environments from the industrial world. Although the set up of the production facilities might seem similar, **there are a series of legislative requirements and guidelines that are dramatically more onerous**.

EXOR has adapted its highly successful eTOP500 Series and eX700 Series to meet these challenges. EXOR alters the panels in many areas to comply with the CEI EN 60529 guidelines with an **incredible level of attention to eliminating the accumulation of food, grease, and product powder particles**.

The rugged stainless-steel fronts are **highly polished to allow particles to flow away** from the surface. The frame has the optimal **angle of contact to the machine surface** to both enable cleaning liquids to wash away and also not to allow bacteria or microbes to remain.

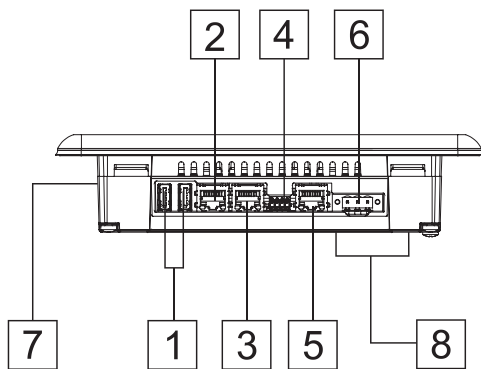
All these measures and more mean that EXOR can offer this product at a **high protection front panel rating of IP6**: resistance to highly aggressive corrosive cleaning substances and resistance to frequent washing at high pressure and high temperature.

No longer will you need to contain the panel within a costly cabinet as is so often seen. Industry sectors that might require this series are the **food, pharmaceutical and chemical industries or anywhere, where the highest level of attention to hygiene is a requirement for reputational risk**.

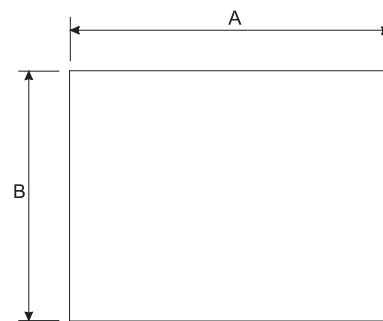
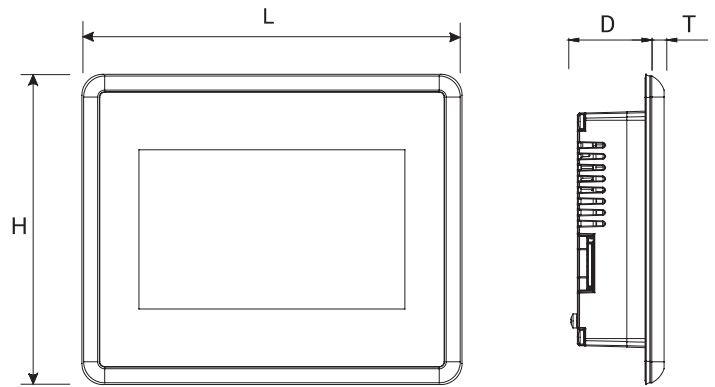
eX707FB - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 16M
Resolution	800x480, WVGA
Brightness	500 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	217x177 mm (8.54x6.96")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	45+10 mm (1.77+0.4")
Weight	2.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
RCM	Yes



- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 SD Card slot
- 8 2 Expansion slots for plugin modules



Cut-out

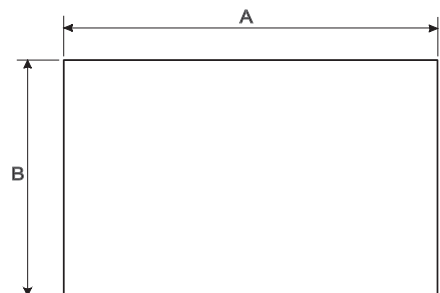
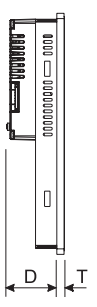
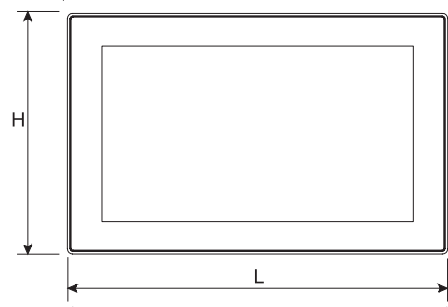
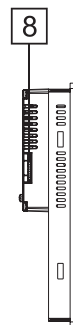
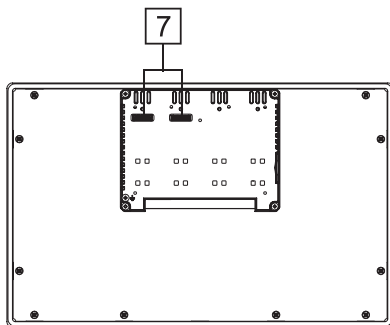
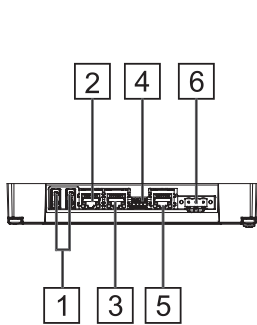
Ordering Information

Model	Part Number	Description
eX707FB	+EX707U4F1	7" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. Ethernet and USB interfaces. JMobile runtime. Blue front panel

eX715FB - Technical Data



System Resources	
Display - Colors	15,6" TFT LED - 16M
Resolution	1366x768, HD
Brightness	400 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.2 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	450x295mm
Cutout AxB	411x256 mm (16.18x10")
Depth D+T	56+8 mm (2.20+0.33")
Weight	5.2 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
RCM	Yes



Cut-out

- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 2 Expansion slots for plugin modules
- 8 SD Card slot

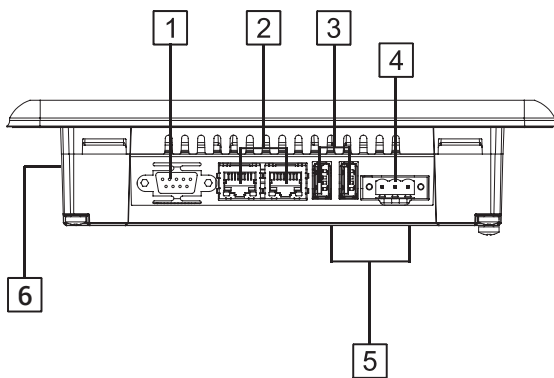
Ordering Information

Model	Part Number	Description
eX715FB	+EX715U4F1	15" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. Ethernet and USB interfaces. JMobile runtime. Blue front panel

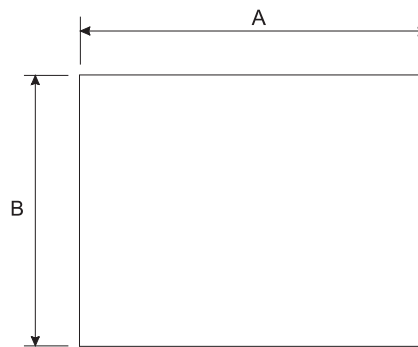
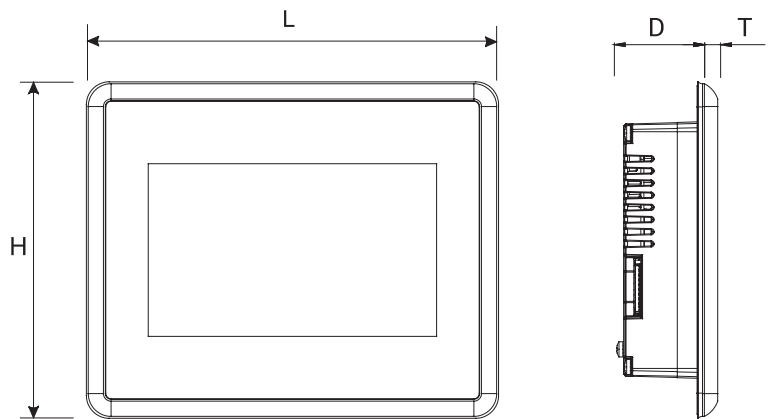
eTOP507MFB - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	400 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.9 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C
Storage Temp	-40 to +85 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	217x177 mm (8.54x6.96")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	45+10 mm (1.77+0.4")
Weight	2.5 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 2x USB Port
- 4 Power Supply
- 5 2x Expansion slots for Plugin modules
- 6 SD Card Slot for removable card



Cut-out

Ordering Information

Model	Part Number	Description
eTOP507MFB	+ETOP507MU1F1	7" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. White front panel.
eTOP507MFB	+ETOP507MU4F1	7" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. Blue front panel.

Accessories



Model	Part Number	Description
PLCM01	+PLCM01U0P1	Plug-in module CAN
PLCM02	+PLCM02U001	Plug-in module KNX/EIB (TP interface)
PLCM03	+PLCM03U0P1	Plug-in module RS-232
PLCM04	+PLCM04U0P1	Plug-in module RS-422/485 with optical insulation
PLCM06	+PLCM06U0P1	Plug-in module Profibus DP slave 12 MB
PLCM07	+PLCM07U0P1	Plug-in Secure Cloud Connector
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license
PLCM01-CDS	+PLCM01U0P2	Plug-in module CAN + CODESYS V2
PLCM02-CDS	+PLCM02U002	Plug-in module KNX/EIB (TP interface) + CODESYS V2
PLCM05-CDS	+PLCM05U0P1	Plug-in module CODESYS V2
PLIO03	+PLIO03U0P1	I/O Module with 20 DI 24 VDC, 12 DO 24 VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct
PLIO04	+PLIO04U0P1	I/O Module with 10 DI 24 VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100
PLIO06	+PLIO06U0P1	Compact I/O module. 8 DI, 6 DO, 1 Relay Output
PLIO07	+PLIO07U001	Compact I/O module. 2 Relay Outputs

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www.electromate.com

sales@electromate.com

Verticals: Harsh Environments

Sold & Serviced By:



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sales@electromate.com

Harsh Environment Series

The Choice for Extreme Conditions

The eTOP500 Glass with a **class-leading performance rating** it has become the choice for extreme conditions.

Now joined with the harsh environment version of the powerful **eX700 Glass Series**, the benefits of IIoT can reach even the most inhospitable or remote of locations.



- Proven Long Term Reliability
- Brilliant Displays Readable in Full Sunlight
- PCAP Touchscreen
- All Metal Enclosure
- Coated Board Protection
- Extended operating temperature
- Module Design Plug Ins for Fieldbus + Networks
- Optional CODESYS integrated PLC
- DNV-GL, IECEx, ATEX
- cULus, cULus Haz. Loc.

Overview

Since 2011 EXOR Harsh Environment HMI's have been serving our customers in environments that are not only harsh for the working of the device but where its **reliable operation can be critical** for the safety of operators.

The eTOP500 Glass lived up to this challenge, with a class leading performance rate it has become the **choice for extreme conditions**.

Now joined with the harsh environment version of the powerful **eX700 Glass Series**, the benefits of IIoT can reach even the most inhospitable or remote of locations.

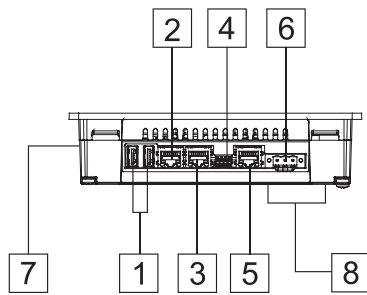
What sets the model apart is the combination of the rugged design with the use of JMobile software which renders the operation of the HMI extremely easy: an important point when the surroundings are difficult.

Connecting to a **vast array of networks and protocols** is achieved via the module design so again aiding the implementation of these HMI within existing architecture.

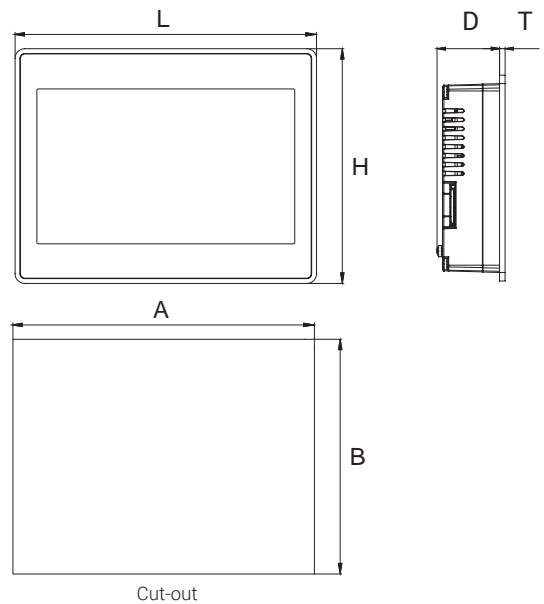
eX707G - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 16M
Resolution	800x480, WVGA
Brightness	600 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+8 mm (1.85+0.31")
Weight	1.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments, Emission EN 60945, Immunity EN 60945 for marine environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



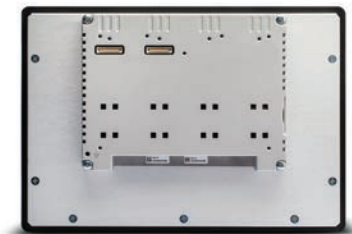
- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 SD Card slot
- 8 2 Expansion slots for plugin modules



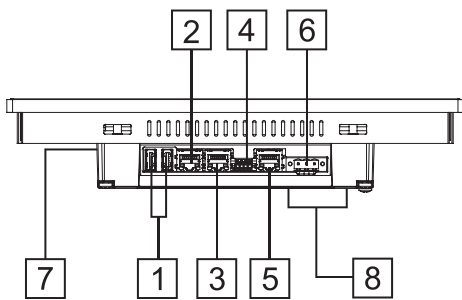
Ordering Information

Model	Part Number	Description
eX707G	+EX707GU5P1	7" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

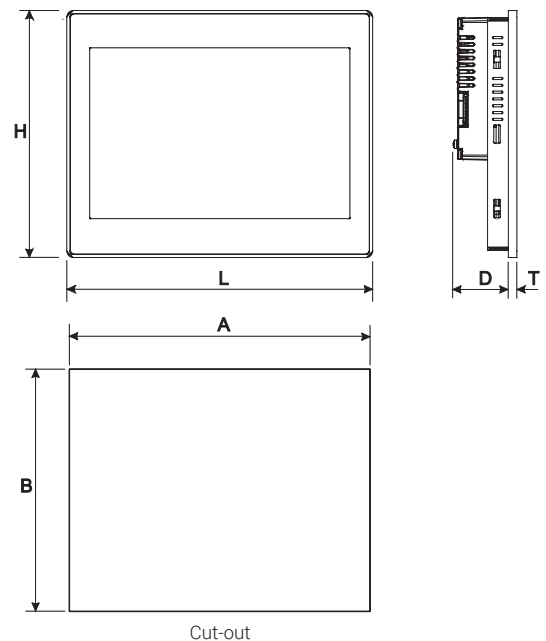
eX710G - Technical Data



System Resources	
Display - Colors	10.1" TFT 16:9 LED - 16M
Resolution	1280x800, WXGA
Brightness	800 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.0 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	282x197 mm (11.10x7.80")
Cutout AxB	271x186 mm (10.67x7.32")
Depth D+T	56+8 mm (2.20+0.33")
Weight	2.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments, Emission EN 60945, Immunity EN 60945 for marine environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
RCM	Yes



- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 SD Card slot
- 8 2 Expansion slots for plugin modules



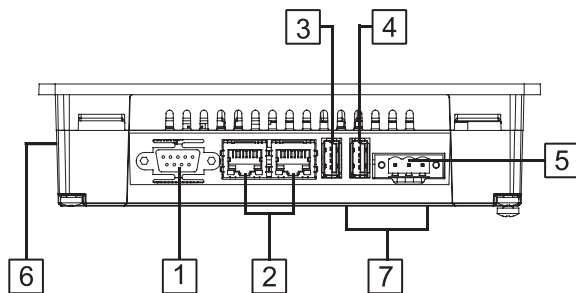
Ordering Information

Model	Part Number	Description
eX710G	+EX710GU5P1	10.1" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

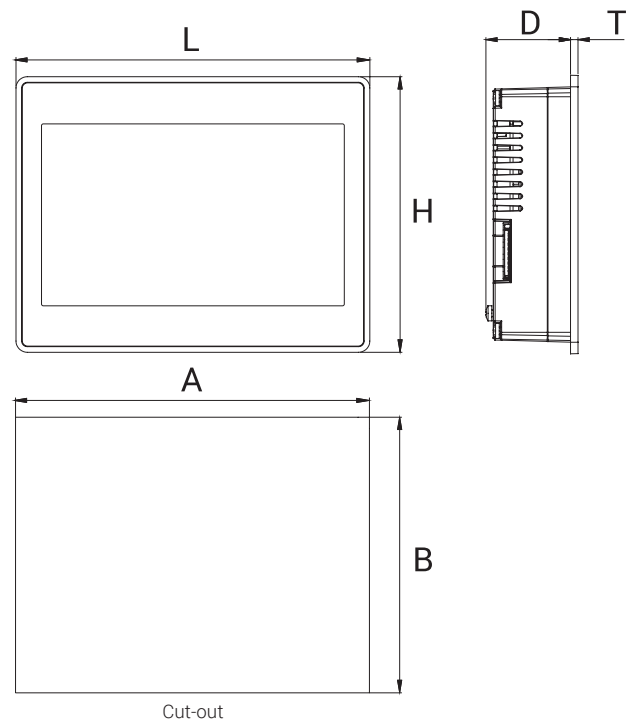
eTOP507G - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	400 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.8 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 to +60 °C (vertical installation)
Storage Temp	-40 to +85 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69K (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+8 mm (1.85+0.31")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T4 Gc -20<Tamb<+60°C, Ex tc IIIC T105°C Dc
ATEX	Zone 2/22: II 3G Ex nA IIC T4 Gc -20<Tamb<+60°C II 3D Ex tc IIIC T105°C Dc
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 SD Card Slot
- 7 2x Expansion slot for Plugin module



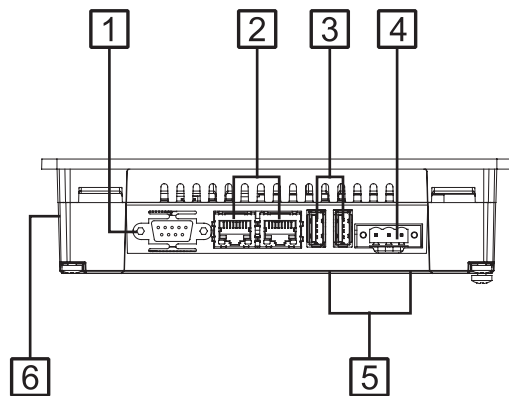
Ordering Information

Model	Part Number	Description
eTOP507G	+ETOP507U5P1	7" widescreen TFT color projected capacitive touchscreen with Ethernet and USB interfaces. JMobile runtime.

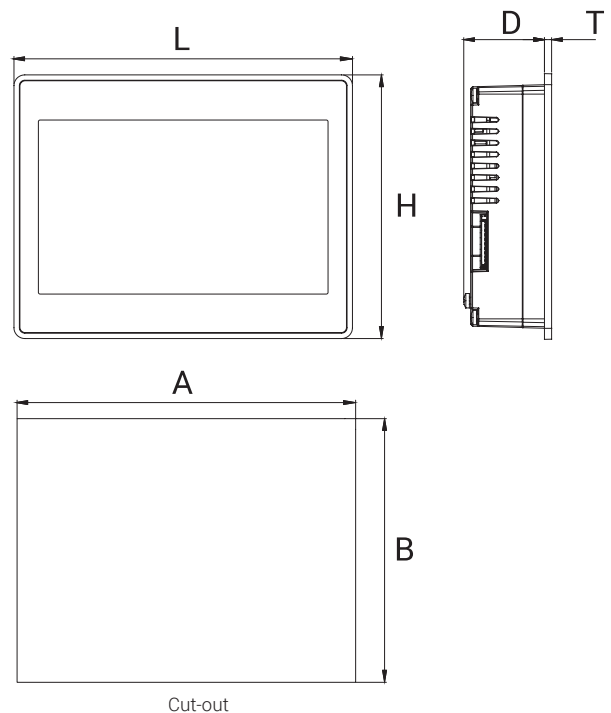
eTOP507MG - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	400 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.9 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 to +60 °C (vertical installation)
Storage Temp	-40 to +85 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69K (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+8 mm (1.85+0.31")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T4 Gc -20<Tamb<+60°C, Ex tc IIIC T105°C Dc
ATEX	Zone 2/22: II 3G Ex nA IIC T4 Gc -20<Tamb<+60°C II 3D Ex tc IIIC T105°C Dc
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 2x USB Ports
- 4 Power Supply
- 5 2x Expansion slots for Plugin modules
- 6 SD Card Slot for removable card



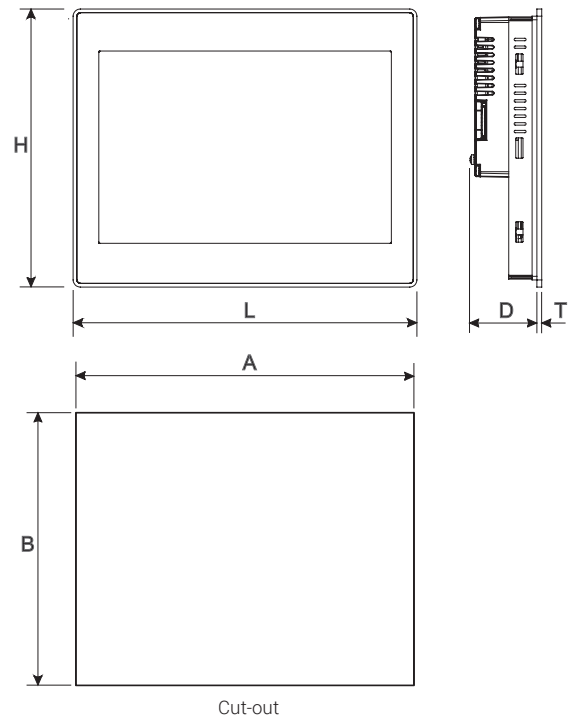
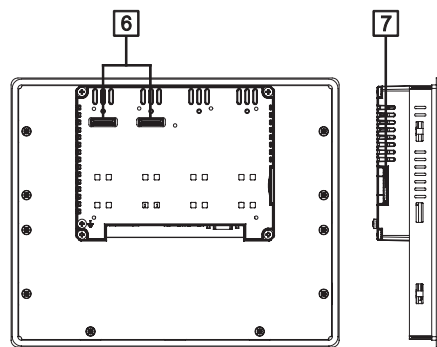
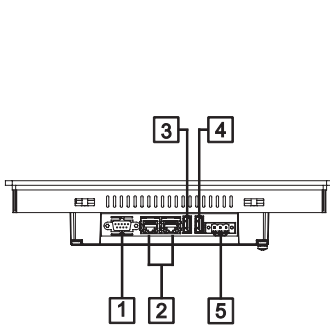
Ordering Information

Model	Part Number	Description
eTOP507MG	+ETOP507MU5P1	7" widescreen TFT color projected capacitive touchscreen with Ethernet and USB interfaces. JMobile runtime.

eTOP510G - Technical Data



System Resources	
Display - Colors	10.1" TFT 16:9 LED - 64K
Resolution	1280x800, WXGA
Brightness	600 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.0 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 to +60 °C (vertical installation)
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69K (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	282x197 mm (11.10x7.80")
Cutout AxB	271x186 mm (10.67x7.32")
Depth D+T	52+8 mm (2.20+0.33")
Weight	Approx 2.7 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T4 Gc -20<Tamb<+60°C, Ex tc IIIC T105°C Dc
ATEX	Zone 2/22: II 3G Ex nA IIC T4 Gc -20<Tamb<+60°C II 3D Ex tc IIIC T105°C Dc
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 2x Expansion slot for Plugin module
- 7 SD Card Slot

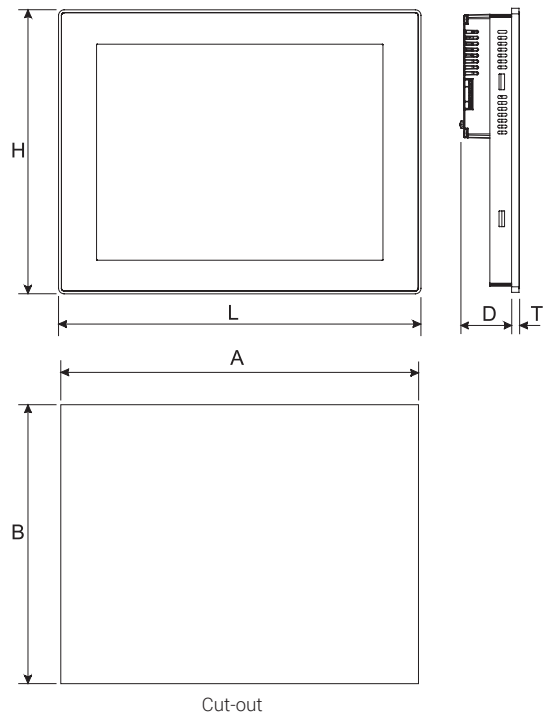
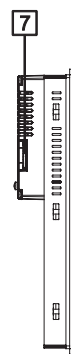
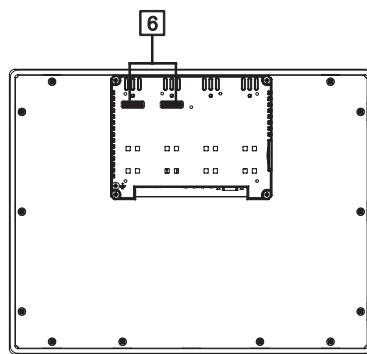
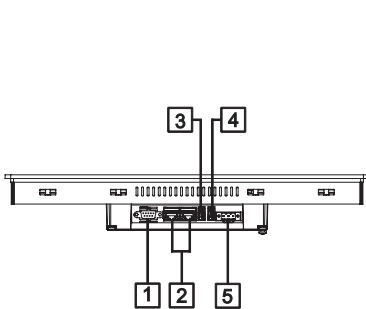
Ordering Information

Model	Part Number	Description
eTOP510G	+ETOP510U5P1	10.1" widescreen TFT color with projected capacitive touchscreen. Ethernet and USB interfaces. JMobile runtime.

eTOP515G - Technical Data



System Resources	
Display - Colors	15" TFT LED - 64K
Resolution	1024x768, XGA
Brightness	1500 Cd/m ² typ
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.4 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 to +60 °C (vertical installation)
Storage Temp	-40 to +85 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP69K (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	392x307 mm (15.43x12.08")
Cutout AxB	381x296 mm (15x11.65")
Depth D+T	56+8.5 mm (2.20+0.33")
Weight	Approx 4.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
IECEX	Zone 2/22: Ex nA IIC T4 Gc -20<Tamb<+60°C, Ex tc IIIC T105°C Dc
ATEX	Zone 2/22: II 3G Ex nA IIC T4 Gc -20<Tamb<+60°C II 3D Ex tc IIIC T105°C Dc
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 2x USB Ports
- 4 Power Supply
- 5 2x Expansion slots for Plugin modules
- 6 2x Plug-in slots
- 7 SD Card Slot for removable card

Ordering Information

Model	Part Number	Description
eTOP515G	+ETOP515U5P1	15" widescreen TFT color projected capacitive touchscreen with Ethernet and USB interfaces. JMobile runtime.

Accessories



Model	Part Number	Description
PLCM01	+PLCM01U0P1	Plug-in module CAN
PLCM02	+PLCM02U001	Plug-in module KNX/EIB (TP interface)
PLCM03	+PLCM03U0P1	Plug-in module RS-232
PLCM04	+PLCM04U0P1	Plug-in module RS-422/485 with optical insulation
PLCM06	+PLCM06U0P1	Plug-in module Profibus DP slave 12 MB
PLCM07	+PLCM07U0P1	Plug-in Secure Cloud Connector
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license
PLCM01-CDS	+PLCM01U0P2	Plug-in module CAN + CODESYS V2
PLCM02-CDS	+PLCM02U002	Plug-in module KNX/EIB (TP interface) + CODESYS V2
PLCM05-CDS	+PLCM05U0P1	Plug-in module CODESYS V2
PLIO03	+PLIO03U0P1	I/O Module with 20 DI 24 VDC, 12 DO 24 VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct
PLIO04	+PLIO04U0P1	I/O Module with 10 DI 24 VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100
PLIO06	+PLIO06U0P1	Compact I/O module. 8 DI, 6 DO, 1 Relay Output
PLIO07	+PLIO07U001	Compact I/O module. 2 Relay Outputs

Sold & Serviced By:

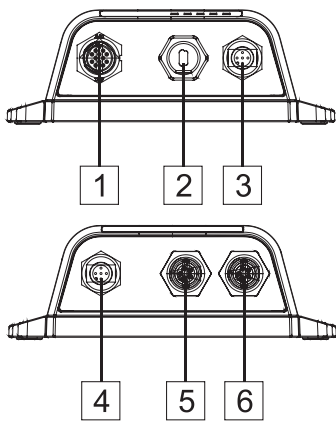
 **ELECTROMATE**

Toll Free Phone (877) SERV098

www.electromate.com

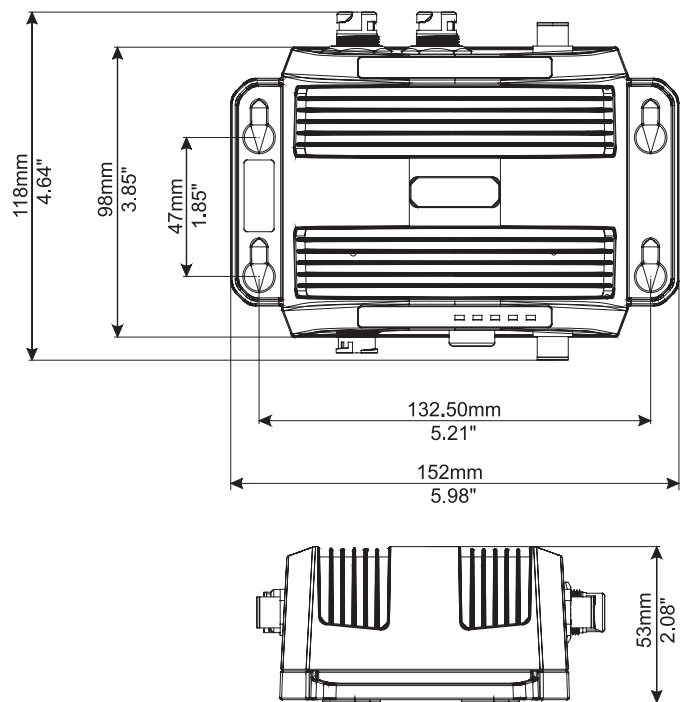
sales@electromate.com

eXware705 - Technical Data



- 1 Power supply, serial port
- 2 USB port
- 3 CAN port
- 4 CAN port
- 5 Ethernet port 1 (10/100 Mb)
- 6 Ethernet port 2 (10/100 Mb)

System Resources	
CPU	ARM Cortex-A8 300 MHz
Operating System	Linux RT
Flash	2 GB
RAM	256 MB
FRAM	64 KB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)
USB port	1 (Host v. 2.0, max. 100 mA)
Serial port	2 (RS-232, RS-485, RS-422, software configurable, optical isolation)
CAN Port	2 (with optical isolation)
SD card	-
Expansion	-
LED indicators	5 (power, Ethernet status)
Ratings	
Power supply	24 VDC (9 to 32 VDC)
Current Consumption	0,15A max. at 24 VDC
Input Protection	Electronic
Battery	Yes
Environment Conditions	
Operating Temp	-15°C to +55°C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing
Protection Class	IP67
Dimensions and Weights	
Faceplate LxH	152x118 mm
Depth D	53 mm
Weight	280g
Approvals	
CE	EN 60945, EMC Emissions and Immunity for marine applications, Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
DNV-GL	Yes
RCM	Yes



Ordering Information

Model	Part Number	Description
eXware705	+EXW705U001	Ruggedized IoT controller and gateway, 2 Ethernet ports, 2 CAN ports, 2 serial ports, 1 USB port

Entry Level HMI

Sold & Serviced By:



Toll Free Phone (877) SERV098
www.electromate.com
sales@electromate.com

eSMART Series

When EXOR first introduced to the market the eSMART series in 2015, it was always our intention to **rethink the budget HMI sector**.

With the progress of material engineering and design, we saw no reason why the budget HMI sector had to be offered with such poor levels of technology and particularly aesthetics.

Our belief and the continued engineering investment has now been recognized by the most severe certification organizations in the world.

There is now **no low cost HMI series in the world that can offer the range of features and certificates**, opening dramatically the range of possible applications and industry verticals.



- JMobile programmable
- Browser Programming Widget
- Chromium Web Browser
- OS Linux RT
- HW and FW Optimised for Extremely Fast Operation
- Supports HTML5 and JS
- Resistive Touchscreen
- Powerful CPU
- High Memory Resources
- Extended voltage range 10-32 VDC
- OPC UA Server and Client
- Vast Library of Protocols
- Extremely Robust Design

Overview

The eSMART series of products combine the power of JMobile – the software inside X Platform with an outstandingly robust design.

With very specific applications in mind we have stripped down the eSMART to only the essential components and have created a truly class leading product.

Stripped down does not mean that the product is not robust. In fact it maintains a **IP66 protection rating** for the front of the unit and is certified to a level not seen in the low cost sector worldwide, allowing use in the most hazardous of environments.

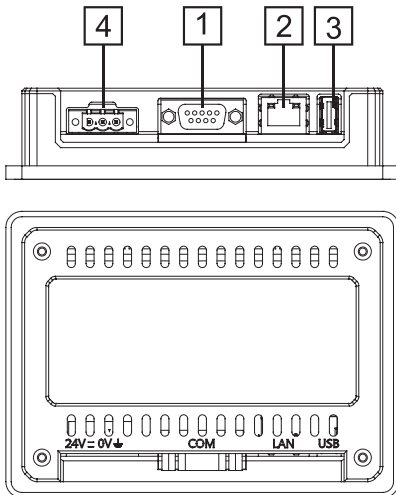
Stripped down does not mean a cheap looking ugly product. The eSMART series is without doubt the most elegant in its class. No other fully plastic housed product can match the eSMART quality.

Stripped down does not mean reduction in high level functionality. Although the display is not at the incredible real life level of the eX700 series, the unique connectivity ability of JMobile – the software inside X Platform, allows the eSMART to communicate with a vast library of critical protocols as well as OPC UA standard and pub/sub server and client.

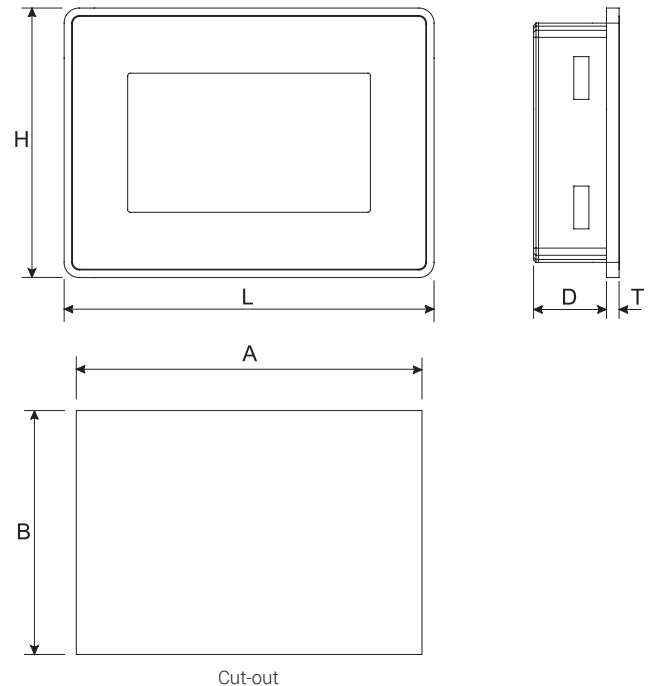
eSMART04 - Technical Data



System Resources	
Display - Colors	4.3" TFT 16:9 - 64K
Resolution	480x272
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 300 MHz
Operating System	Linux 3.12
Flash	2 GB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.25 A max. at 24 VDC
Input Protection	Automatic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to 50 °C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	29+5 mm (1.14+0.19")
Weight	Approx 0.4 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
UL	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (vers. 2.0 - 1.1)
- 4 Power Supply



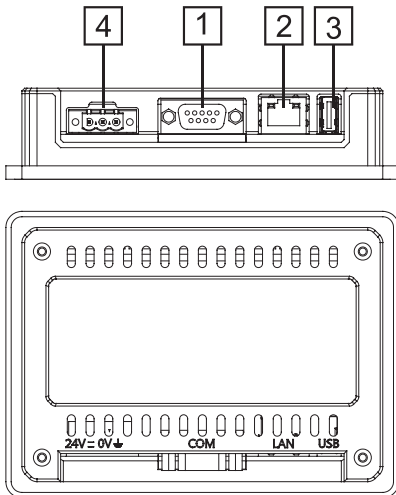
Ordering Information

Model	Part Number	Description
eSMART04	+ESMA04U301	4" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime

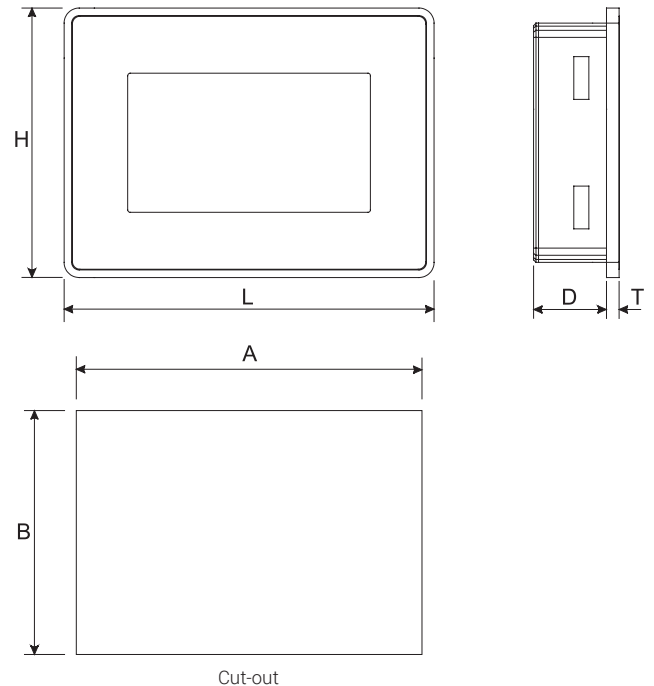
eSMART04M - Technical Data



System Resources	
Display - Colors	4.3" TFT 16:9 - 64K
Resolution	480x272
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex A8 1 GHz
Operating System	Linux 3.12
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.25 A max. at 24 VDC
Input Protection	Automatic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to 50 °C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	29+5 mm (1.14+0.19")
Weight	Approx 0.4 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
UL	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (vers. 2.0 - 1.1)
- 4 Power Supply



Cut-out

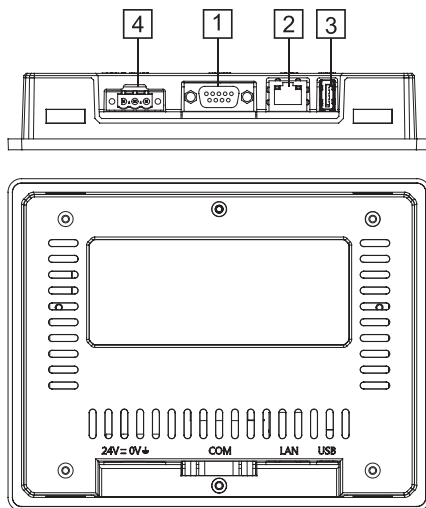
Ordering Information

Model	Part Number	Description
eSMART04M	+ESMA04MU301	4" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime

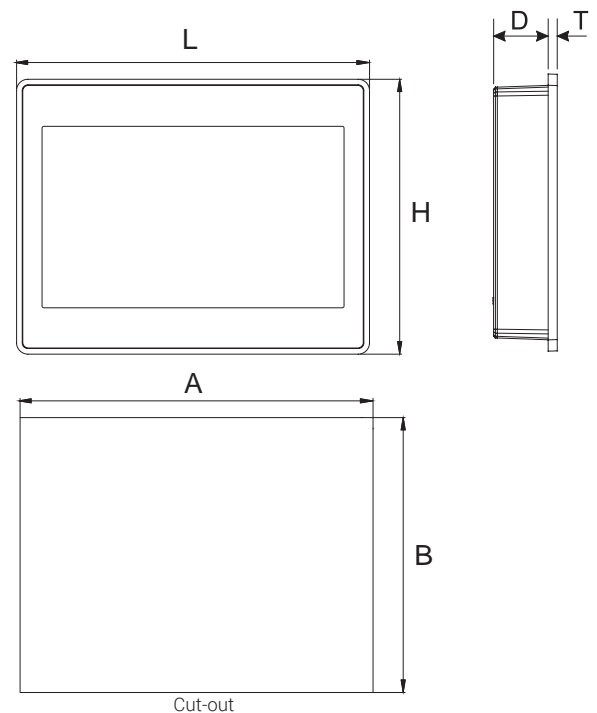
eSMART07M -Technical Data



System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.3 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to 50 °C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	29+5 mm (1.14+0.19")
Weight	Approx 0.6 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
UL	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (vers. 2.0 - 1.1)
- 4 Power Supply



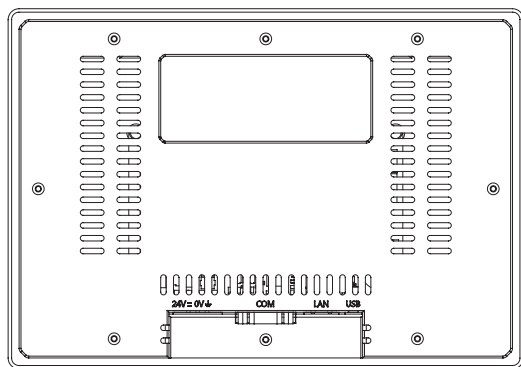
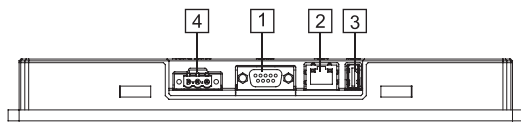
Ordering Information

Model	Part Number	Description
eSMART07M	+ESMA07MU301	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime

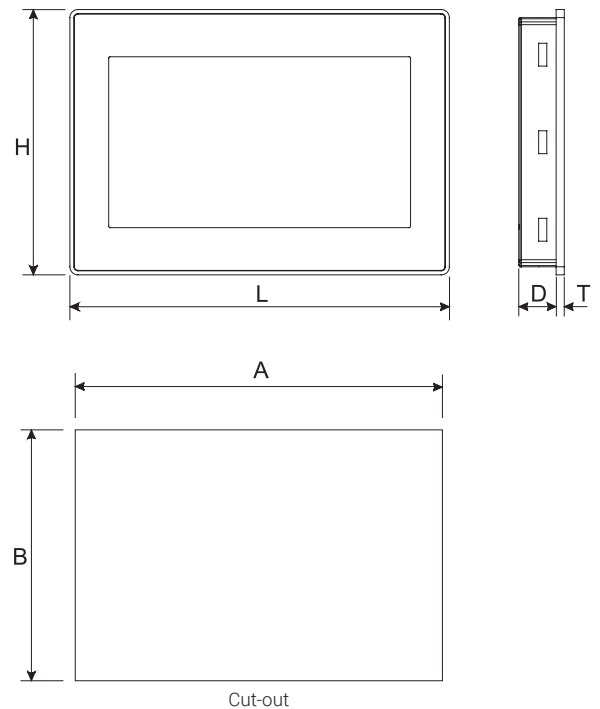
eSMART10 - Technical Data



System Resources	
Display - Colors	10.1" TFT 16:9 - 64K
Resolution	1024x600, WVGA
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.38 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to 50 °C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	282x197 mm (11.10x7.80")
Cutout AxB	271x186 mm (10.66x7.32")
Depth D+T	29+6 mm (1.14+0.23")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
UL	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 Power Supply



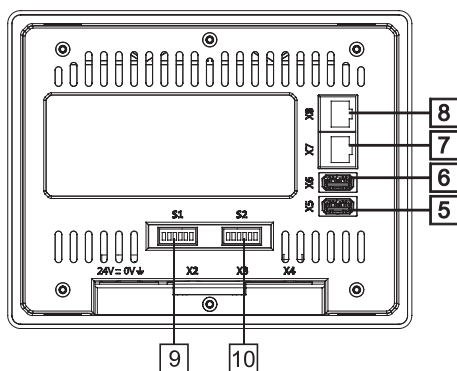
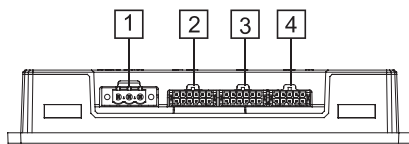
Ordering Information

Model	Part Number	Description
eSMART10	+ESMA10U301	10" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime.

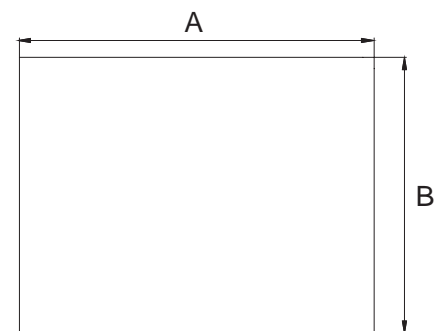
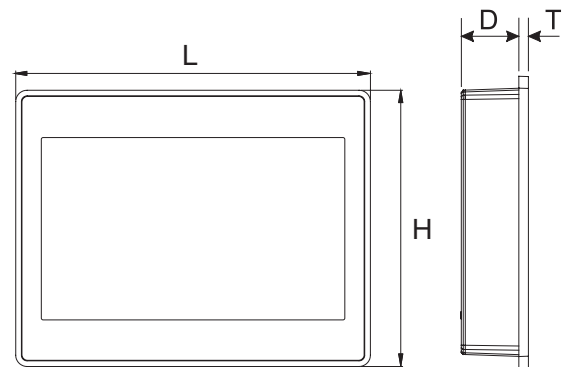
eSMART107 -Technical Data



System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, No
Interface	
Ethernet port	2 (port 0 - 10/100/1000, port 1 - 10/100)
USB port	2 (Host V2.0, max. 100 mA)
Serial port	2 (RS-232), 2 (RS-422/RS-485 isolated), 2 (CAN 2.0b isolated)
SD card	No
Expansion	No
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.3 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to +50°C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	29+5 mm (1.14+0.19")
Weight	0.875 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes



- | | |
|----------------------------|------------------------------------|
| 1 Power Supply | 6 USB port |
| 2 Serial port RS-485 + CAN | 7 Ethernet port 0 (10/100/1000 Mb) |
| 3 Serial port RS-485 + CAN | 8 Ethernet port 1 (10/100 Mb) |
| 4 Serial port 2x RS-232 | 9 DIP switch port configuration |
| 5 USB port | 10 DIP switch port configuration |



Cut-out

Ordering Information

Model	Part Number	Description
eSMART107	+ESMA107U301	7" TFT color with touchscreen. 2 Ethernet ports, 2 CAN ports, 4 serial ports, 2 USB ports. JMobile runtime.



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eX700 Series

Exor has updated its flagship product the eX700 Series and gone much further, creating the ultimate all-in-one solution ready for scalable applications across many industries.

Super High Performance, High Resolution Glass Cap Touch, Fully Connectable upstream & downstream, Powerful Integrated PLC w/ all the major protocols, Integrated VPN with Service Cloud, all with up to a 5 year warranty available.



- Created Within the X Platform
- Industry 4.0 Product Concept
- HW and FW Optimised for Extremely Fast Operation
- System and Project Rapid Boot-Up
- OS Linux RT
- JMobile – the software that powers the X Platform
- CODESYS V3 with Ethernet I/O Stacks
- Multitouch and Gesturing
- Brilliant 2,100,000 pixel Display
- Wide Angle Visibility
- Beautiful 16,000,000 Colors
- Resistant to Scratches, UV and Chemicals
- Total Glass Design
- Network Separation possible via Up to 3 Ethernet
- Networks with different IP addresses
- Plug in Modules for System Expansion
- IECEx, ATEX, DNV-GL, EU RO MR, Lloyd's Register, cULus, cULus Haz. Loc., RCM

Overview

A beautiful product, created within the X Platform and hence with an unsurpassed ability to offer access and scalability into Industry 4.0. The tremendous technical flexibility is backed by a company with 45 years in the industry and still with a market price at previous models.

The eX700 Series represents a ground breaking product to come to market:
The Revolutionary IIoT Controller.

The product's concept permits a prudent investment into the implementation of IIoT and hence Industry 4.0 compatibility.

As such it provides a true all-in-one solution covering many functions such as:

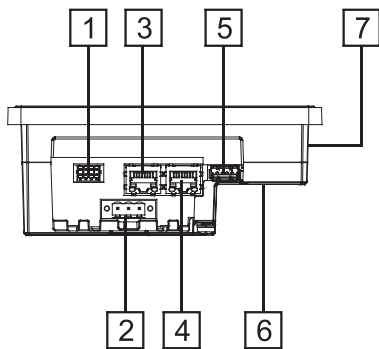
- As a powerful **Browser** with industry standard Web engine powering state of the art Chromium browser
- As a powerful **HMI** using JMobile inside with multi-touch operation in a brilliant high resolution display
- As a **Gateway** with up to 3 Ethernet networks, OPC UA pub/sub* Server and Client, future TSN connectivity* and multiple protocols
- As a **PLC** with the CODESYS V3 can function as Master through major protocols

* Hardware and software ready for standard

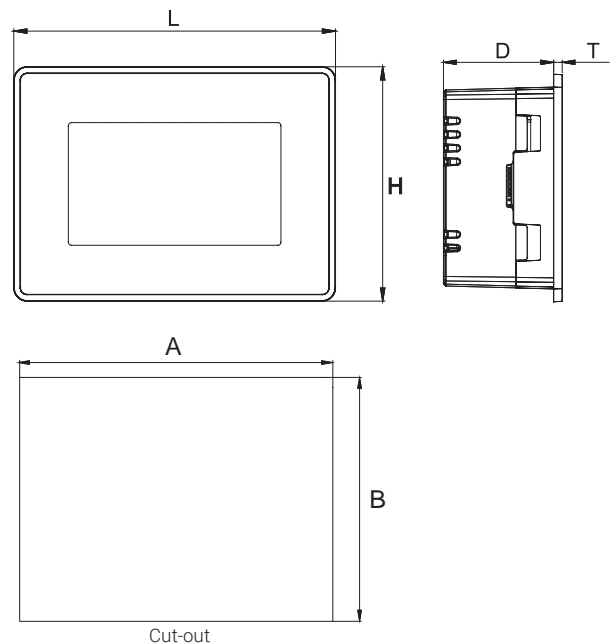
eX705 - Technical Data



System Resources	
Display - Colors	5" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux RT
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)
USB port	1 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 2 serial ports using plug-in modules.
SD card	Yes
Expansion	1 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.6 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	52+8 mm (2.40+0.31")
Weight	1.3 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
LR	Yes
EU RO MR	Yes
RCM	Yes



- 1 Serial port
- 2 Power supply
- 3 Ethernet port 1 (10/100 Mb)
- 4 Ethernet port 0 (10/100 Mb)
- 5 USB port 1
- 6 Expansion slots for plug-in modules
- 7 SD Card slot



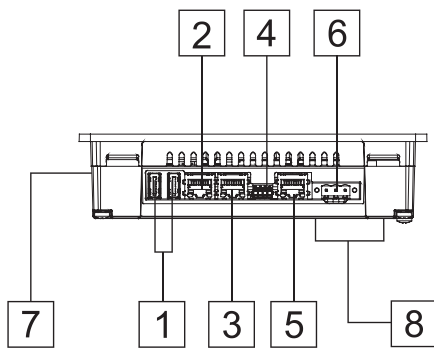
Ordering Information

Model	Part Number	Description
eX705	+EX705U5P1	5" widescreen TFT color with multitouch projected capacitive touchscreen. 2 Ethernet ports, 1 serial port, 1 USB port. JMobile runtime.

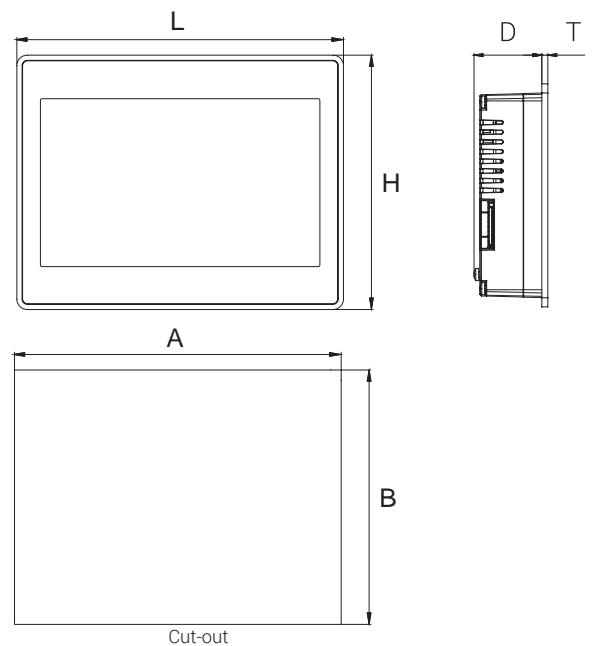
eX707 - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 16M
Resolution	800x480, WVGA
Brightness	500 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+8 mm (1.85+0.31")
Weight	1.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
LR	Yes
EU RO MR	Yes
RCM	Yes



- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 SD Card slot
- 8 2 Expansion slots for plugin modules



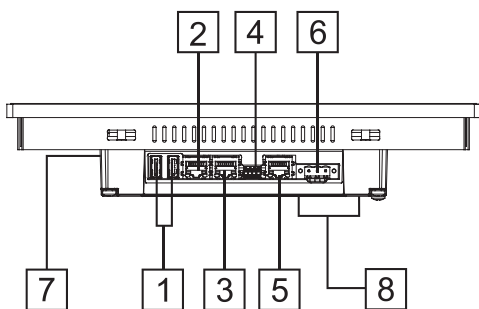
Ordering Information

Model	Part Number	Description
eX707	+EX707U5P1	7" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

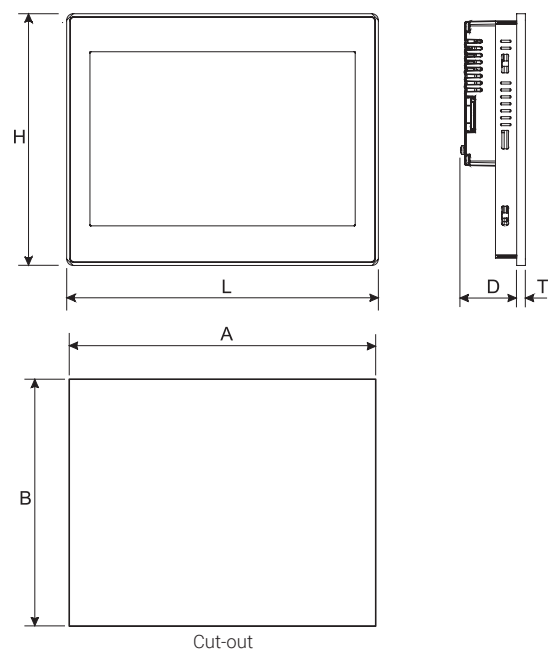
eX710 - Technical Data



System Resources	
Display - Colors	10.1" TFT 16:9 LED - 16M
Resolution	1280x800, WXGA
Brightness	500 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.0 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	282x197 mm (11.10x7.80")
Cutout AxB	271x186 mm (10.67x7.32")
Depth D+T	56+8 mm (2.20+0.33")
Weight	2.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
LR	Yes
EU RO MR	Yes
RCM	Yes



- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 SD Card slot
- 8 2 Expansion slots for plugin modules



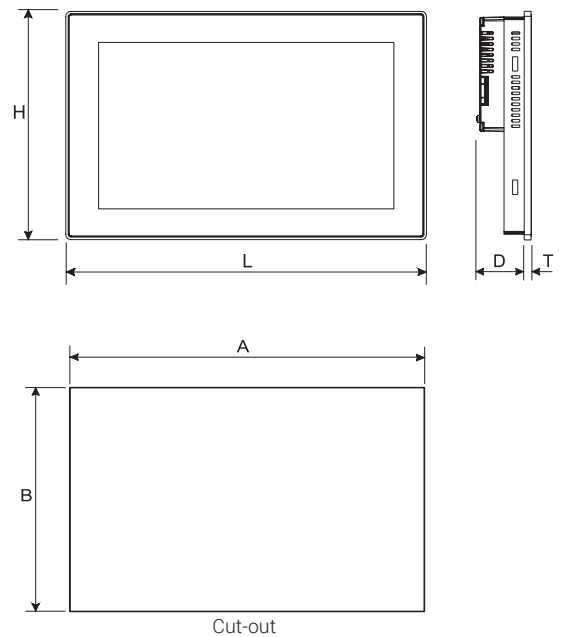
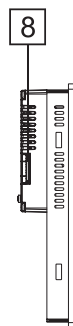
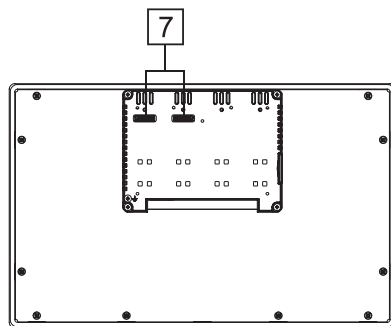
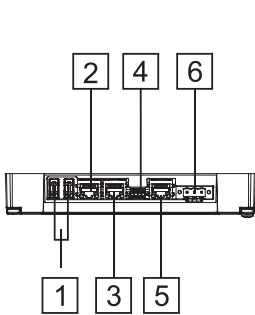
Ordering Information

Model	Part Number	Description
eX710	+EX710U5P1	10.1" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

eX715 - Technical Data



System Resources	
Display - Colors	15.6" TFT LED - 16M
Resolution	1366x768, HD
Brightness	400 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.2 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	422x267 mm (16.6x10.5")
Cutout AxB	411x256 mm (16.18x10")
Depth D+T	56+8 mm (2.20+0.33")
Weight	4.1 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
LR	Yes
EU RO MR	Yes
RCM	Yes

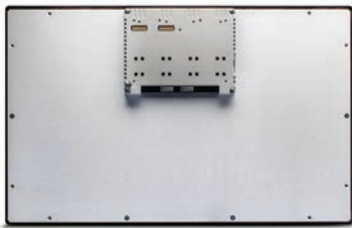


- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 2 Expansion slots for plugin modules
- 8 SD Card slot

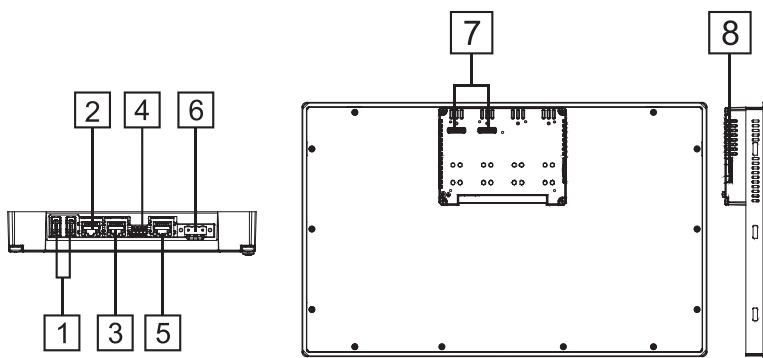
Ordering Information

Model	Part Number	Description
eX715	+EX715U5P1	15.6" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

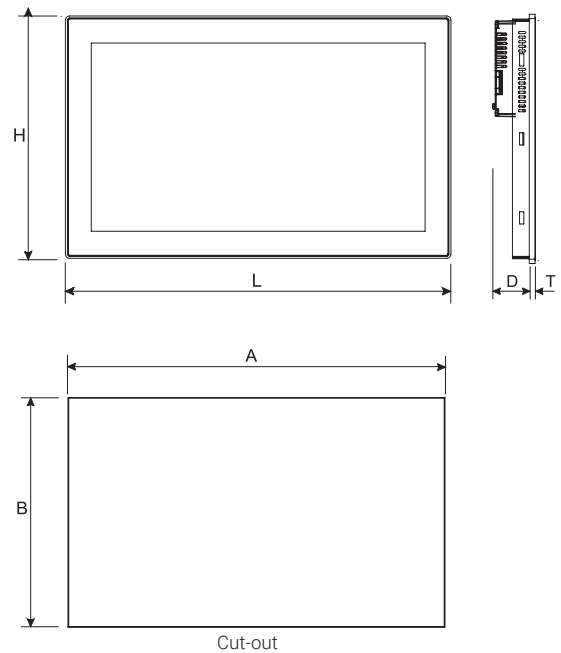
eX721 - Technical Data



System Resources	
Display - Colors	21,5" TFT LED - 16M
Resolution	1920x1080, full HD
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.7 A at 24 VDC (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	552x347 mm (21,7x13,66")
Cutout AxB	541x336 mm
Depth D+T	56+8.5 mm
Weight	6.1 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
IECEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL	Yes
LR	Yes
EU RO MR	Yes
RCM	Yes



- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 7 2 Expansion slots for plugin modules
- 8 SD Card slot



Ordering Information

Model	Part Number	Description
eX721	+EX721U5P1	21.5" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.



Model	Part Number	Description
PLCM01	+PLCM01U0P1	Plug-in module CAN
PLCM02	+PLCM02U001	Plug-in module KNX/EIB (TP interface)
PLCM03	+PLCM03U0P1	Plug-in module RS-232
PLCM04	+PLCM04U0P1	Plug-in module RS-422/485 with optical insulation
PLCM05	+PLCM05U0P2	Plug-in extender for use with PLIO03/PLIO04 (only for eX705)
PLCM06	+PLCM06U0P1	Plug-in module Profibus DP slave 12 MB
PLCM09	+PLCM09U0P1	Plug-in Wireless Modem
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license
PLIO03	+PLIO03U0P1	I/O Module with 20 DI 24VDC, 12 DO 24VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct
PLIO04	+PLIO04U0P1	I/O Module with 10 DI 24VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100
PLIO06	+PLIO06U0P1	Compact I/O module. 8 DI, 6 DO, 1 Relay Output
PLIO07	+PLIO07U001	Compact I/O module. 2 Relay Outputs

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Classic HMI

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eTOP500 Series

Solid as a Rock

The eTOP Series 500 combines state-of-the-art features and **top performance with an outstanding design**. The eTOP Series 500 come with a choice of certifications and approvals that make them the solution of **choice for all requirements**.



- 5 Year Warranty
- Innovative mechanical design and all-metal enclosure
- Available in different sizes from 4.3" to 15"
- High-performance touchscreen HMI's
- Brilliant displays with LED technology all in full color
- Gateway function, remote installation of application and remote assistance
- Ethernet, USB, serial ports and MPI integrated
- Optional plug-in modules for fieldbus systems and networks
- Support SD Card
- Coating on all Electronic Boards
- Optional IEC 61131-3 integrated PLC (CODESYS V2 or V3)
- Front available in three colors (White/Black/Silver)
- Special versions for special applications

Overview

The eTOP Series 500 combine state-of-the-art features and **top performance with an outstanding design**.

The eTOP Series 500 come with a choice of certifications and approvals that make them the **solution of choice for all requirements**.

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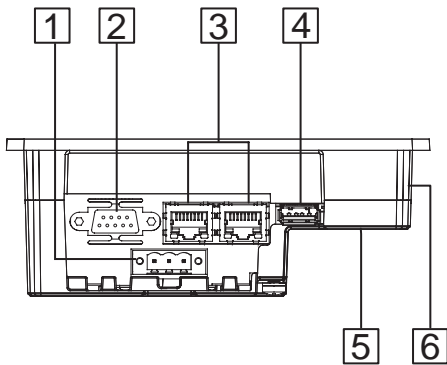


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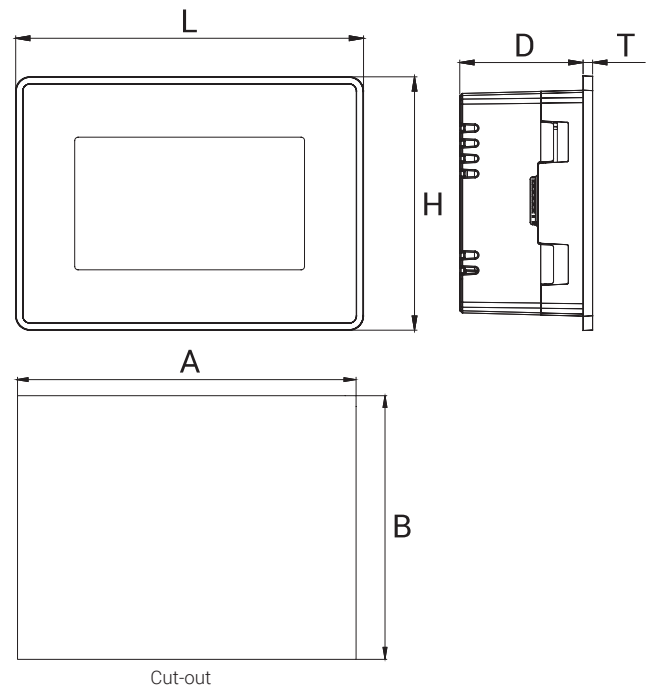
eTOP504 - Technical Data



System Resources	
Display - Colors	4.3" TFT 16:9 LED - 64K
Resolution	480x272, WQVGA
Brightness	150 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	1 (port 1 - Host V2.0)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	1 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.55 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	56+4 mm (2.40+0.16")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Alimentazione
- 2 Porta seriale
- 3 2 Porte Ethernet
- 4 USB Port
- 5 Expansion slots for Plugin modules
- 6 SD Card Slot



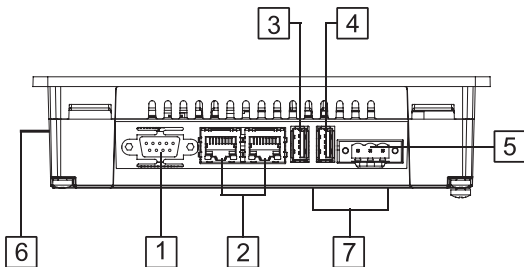
Ordering Information

Model	Part Number	Description
eTOP504-White	ETOP504U1P1	4.3" TFT color touchscreen panel with Ethernet interface, White front panel. JMobile runtime.
eTOP504-Silver	ETOP504U2P1	4.3" TFT color touchscreen panel with Ethernet interface. Silver front panel. JMobile runtime.
eTOP504-Black	ETOP504U3P1	4.3" TFT color touchscreen panel with Ethernet interface. Black front panel. JMobile runtime.
PROTFOIL-04-GL	R-PROT11	Disposable protection foil for 3.5"/3.8"/4.3" eTOP touch panels (10 pieces)
PROTFOIL-04-UV	R-PROT17	Disposable protection foil for 3.5"/3.8"/4.3" eTOP touch panels (10 pieces). UV resistant

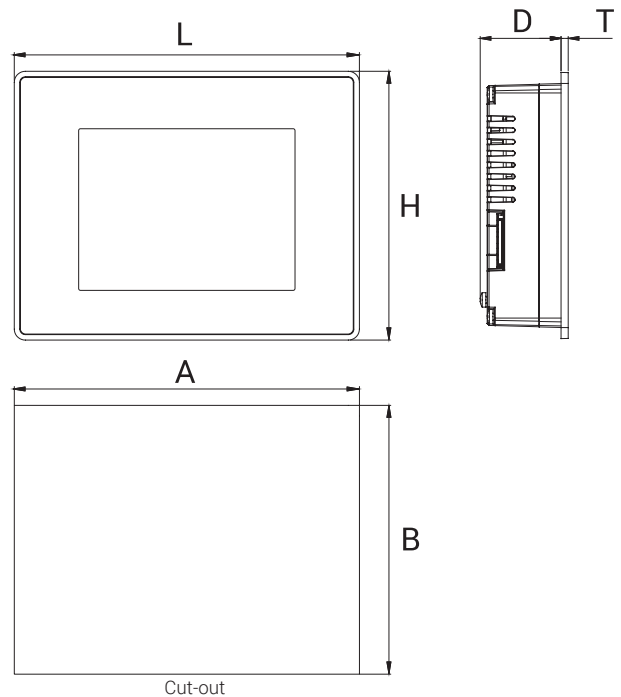
eTOP506 - Technical Data



System Resources	
Display - Colors	5.7" TFT LED - 64K
Resolution	320x240, QVGA
Brightness	200 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.65 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+4 mm (1.85+0.16")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 SD Card Slot
- 7 2x Expansion slot for Plugin module



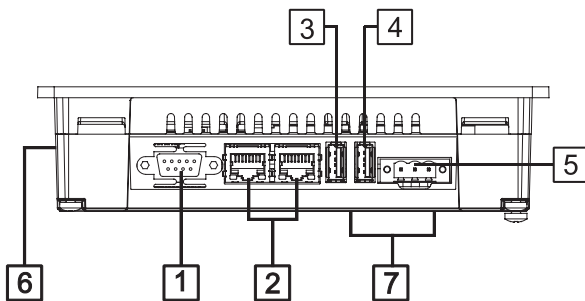
Ordering Information

Model	Part Number	Description
eTOP506-White	ETOP506U1P1	5.7" TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP506-Silver	ETOP506U2P1	5.7" TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP506-Black	ETOP506U3P1	5.7" TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-07-GL	R-PROT12	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces).
PROTFOIL-07-UV	R-PROT18	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces). UV resistant.

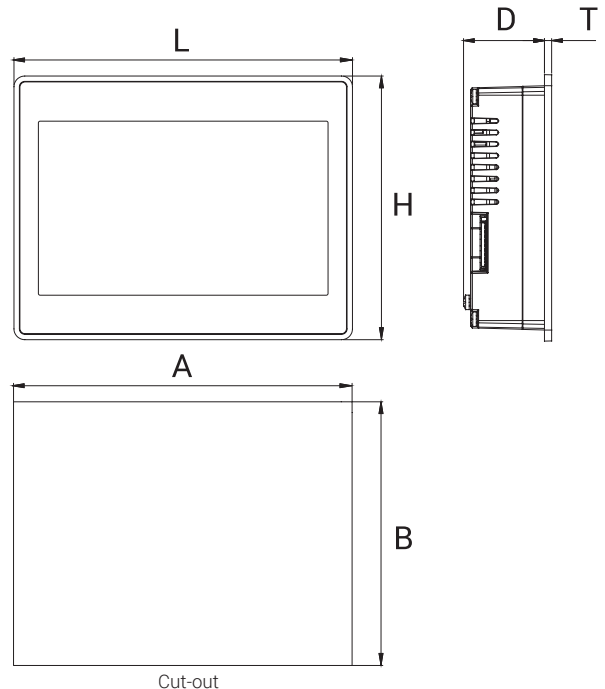
eTOP507 - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+4 mm (1.85+0.16")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 SD Card Slot
- 7 2x Expansion slot for Plugin module



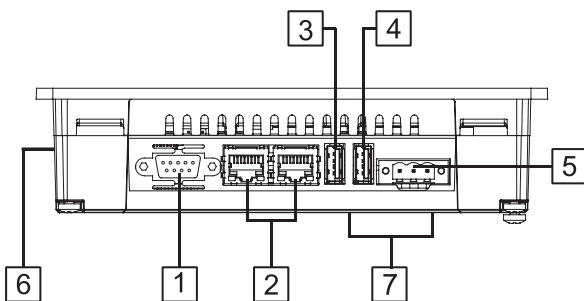
Ordering Information

Model	Part Number	Description
eTOP507-White	+ETOP507U1P3	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP507-Silver	+ETOP507U2P3	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP507-Black	+ETOP507U3P3	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-07-GL	R-PROT12	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces).
PROTFOIL-07-UV	R-PROT18	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces). UV resistant.

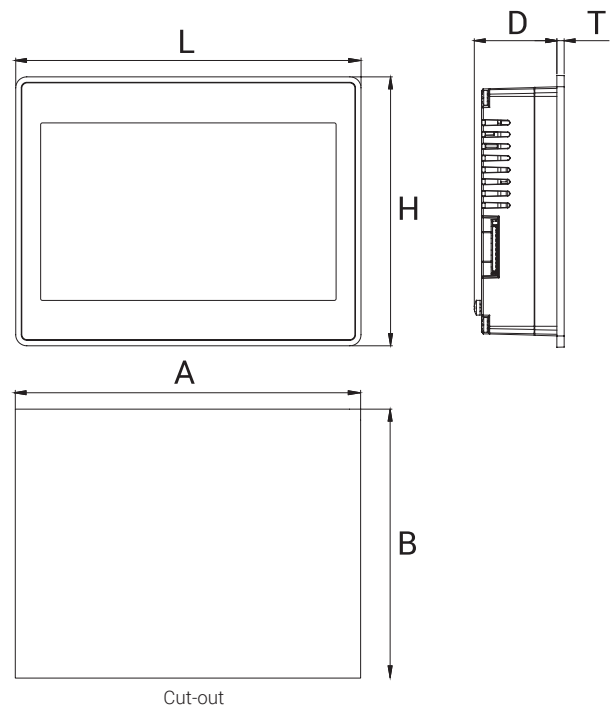
eTOP507M - Technical Data



System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	47+4 mm (1.85+0.16")
Weight	Approx 1.0 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 SD Card Slot
- 7 2x Expansion slot for Plugin module



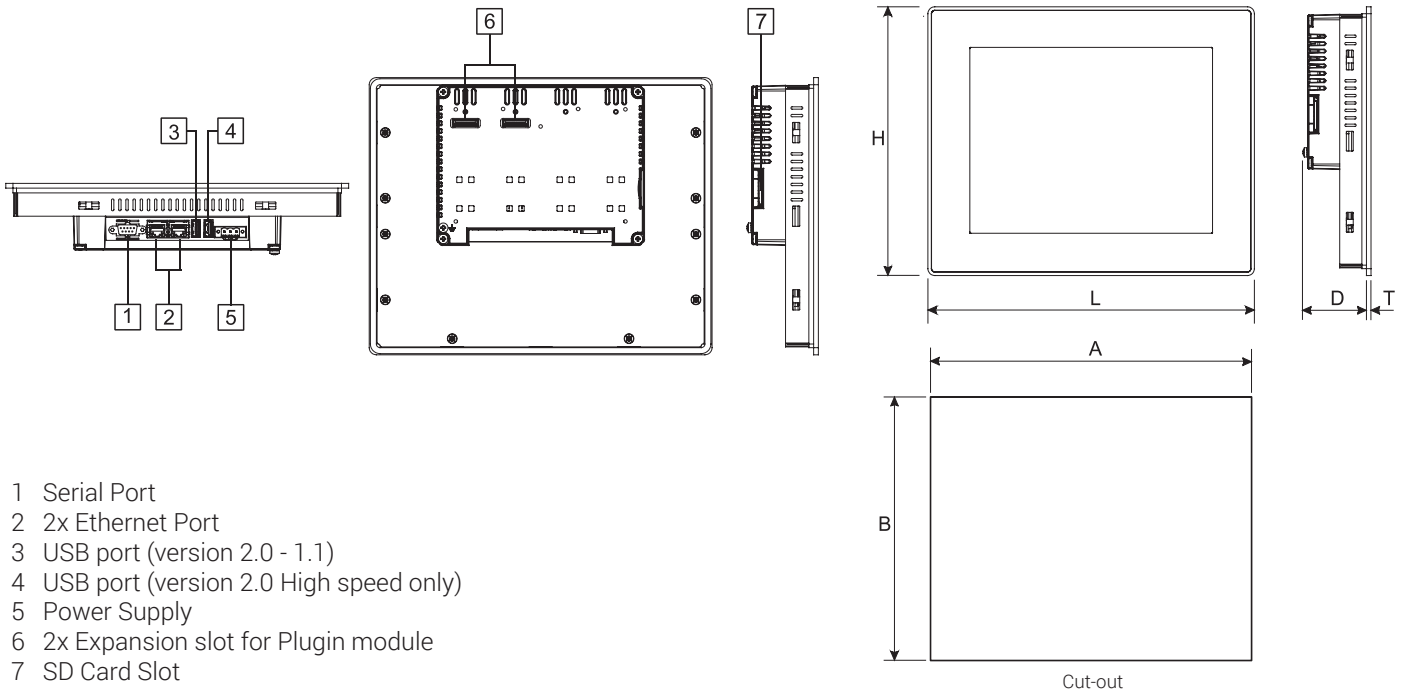
Ordering Information

Model	Part Number	Description
eTOP507M-White	+ETOP507MU1P1	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP507M-Silver	+ETOP507MU2P1	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP507M-Black	+ETOP507MU3P1	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-07-GL	R-PROT12	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces).
PROTFOIL-07-UV	R-PROT18	Disposable protection foil for 5.7" and 7" eTOP touch panels (10 pieces). UV resistant.

eTOP510 - Technical Data



System Resources	
Display - Colors	10"4 TFT LED - 64K
Resolution	800x600, SVGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	287x232 mm (11.3x9.13")
Cutout AxB	276x221 mm (10.86x8.70")
Depth D+T	56+4 mm (2.20+0.16")
Weight	Approx. 2.1 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



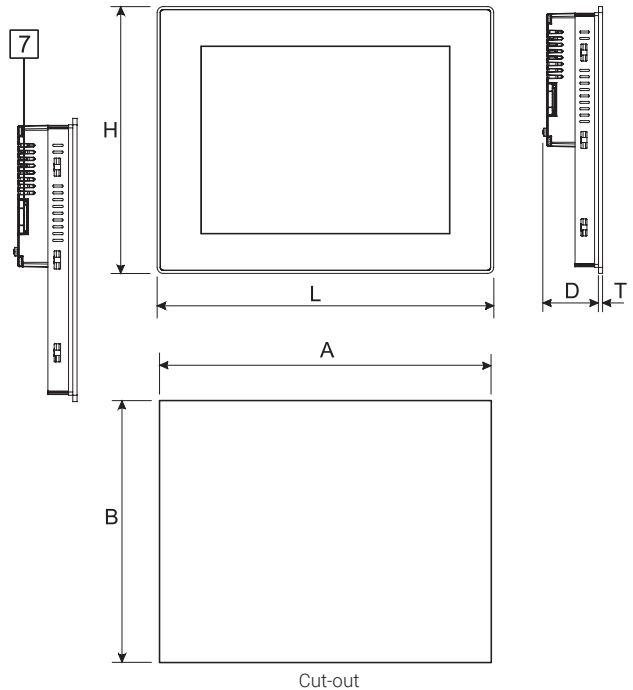
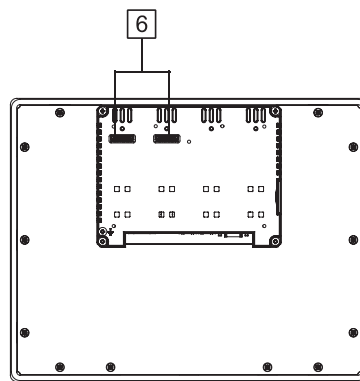
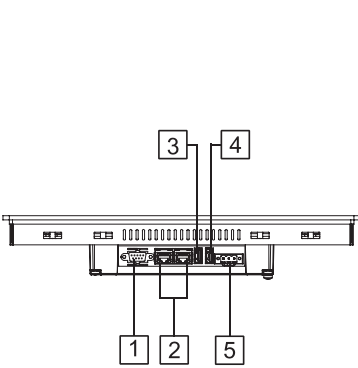
Ordering Information

Model	Part Number	Description
eTOP510-White	+ETOP510U1P1	10"4 TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP510-Silver	+ETOP510U2P1	10"4 TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP510-Black	+ETOP510U3P1	10"4 TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-10-GL	R-PROT14	Disposable protection foil for 10"4 eTOP touch panels (10 pieces).
PROTFOIL-10-UV	R-PROT20	Disposable protection foil for 10"4 eTOP touch panels (10 pieces). UV resistant.

eTOP512 - Technical Data



System Resources	
Display - Colors	12"1 TFT LED - 64K
Resolution	800x600, SVGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.05 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	336x267 mm (13.22x10.51")
Cutout AxB	326x256 mm (12.83x10.07")
Depth D+T	56+4 mm (2.20+0.16")
Weight	Approx. 2.8 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 2x Expansion slot for Plugin module
- 7 SD Card Slot

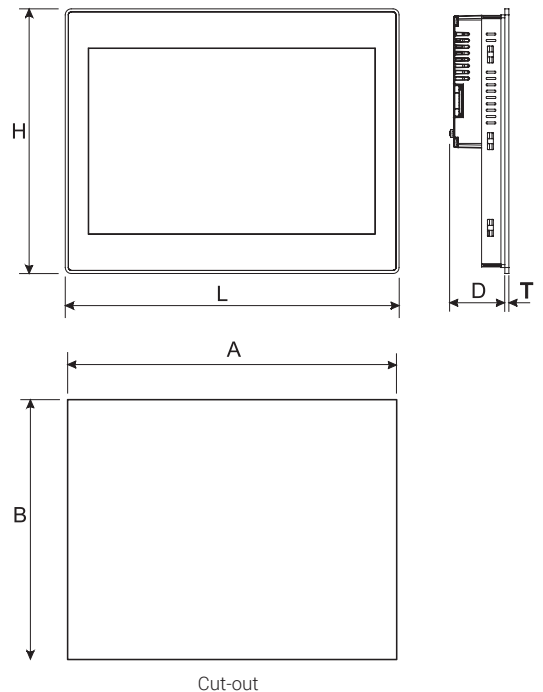
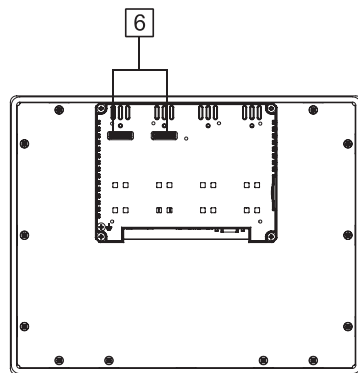
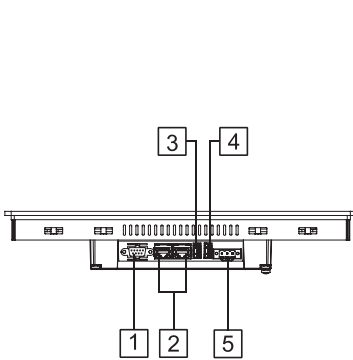
Ordering Information

Model	Part Number	Description
eTOP512-White	+ETOP512U1P1	12"1 TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP512-Silver	+ETOP512U2P1	12"1 TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP512-Black	+ETOP512U3P1	12"1 TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-15-GL	R-PROT13	Disposable protection foil for 12"1 eTOP touch panels (10 pieces).
PROTFOIL-13-UV	R-PROT21	Disposable protection foil for 12"1 eTOP touch panels (10 pieces). UV resistant.

eTOP513 - Technical Data



System Resources	
Display - Colors	13"3 TFT 16:9 LED - 64K
Resolution	1280x800, WXGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.15 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	336x267 mm (13.22x10.51")
Cutout AxB	326x256 mm (12.83x10.07")
Depth D+T	56+4 mm (2.20+0.16")
Weight	Approx. 2.8 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



- 1 Serial Port
- 2 2x Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 USB port (version 2.0 High speed only)
- 5 Power Supply
- 6 2x Expansion slot for Plugin module
- 7 SD Card Slot

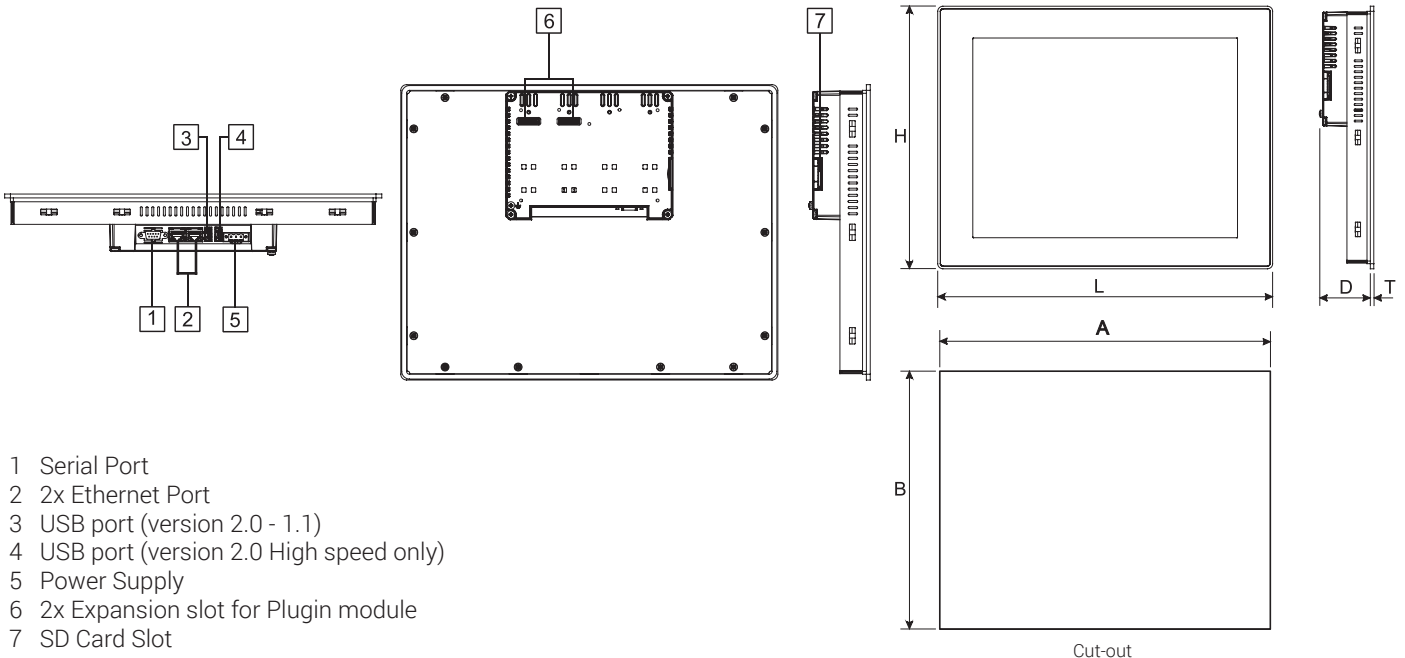
Ordering Information

Model	Part Number	Description
eTOP513-White	+ETOP513U1P1	13"3 widescreen TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP513-Silver	+ETOP513U2P1	13"3 widescreen TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP513-Black	+ETOP513U3P1	13"3 widescreen TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-13-GL	R-PROT15	Disposable protection foil for 13"3 widescreen eTOP touch panels (10 pieces).
PROTFOIL-13-UV	R-PROT21	Disposable protection foil for 13"3 widescreen eTOP touch panels (10 pieces). UV resistant.

eTOP515 - Technical Data



System Resources	
Display - Colors	15" TFT LED - 64K
Resolution	1024x768, XGA
Brightness	300 Cd/m ² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, MPI software configurable)
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	
Power supply	24 VDC (10 to 32 VDC)
Current Consumption	1.25 A at 24 VDC (max.)
Input Protection	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	0 to +50 °C
Storage Temp	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate LxH	392x307 mm (15.43x12.08")
Cutout AxB	381x296 mm (15x11.65")
Depth D+T	60+4 mm (2.36+0.16")
Weight	Approx 3.5 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508
UL	cULus: Class I Div. 2
DNV-GL	Yes
RCM	Yes



Ordering Information

Model	Part Number	Description
eTOP515-White	+ETOP515U1P1	15" TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP515-Silver	+ETOP515U2P1	15" TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP515-Black	+ETOP515U3P1	15" TFT color touchscreen with Ethernet and USB interfaces. Black front panel. JMobile runtime.
PROTFOIL-15-GL	R-PROT16	Disposable protection foil for 15" widescreen eTOP touch panels (10 pieces).
PROTFOIL-15-UV	R-PROT22	Disposable protection foil for 15" widescreen eTOP touch panels (10 pieces). UV resistant.

Accessories



Model	Part Number	Description
PLCM01	+PLCM01U0P1	Plug-in module CAN
PLCM02	+PLCM02U001	Plug-in module KNX/EIB (TP interface)
PLCM03	+PLCM03U0P1	Plug-in module RS-232
PLCM04	+PLCM04U0P1	Plug-in module RS-422/485 with optical insulation
PLCM05	+PLCM05U0P2	Plug-in extender for use with PLIO03/PLIO04 (only for eTOP504)
PLCM06	+PLCM06U0P1	Plug-in module Profibus DP slave 12 MB
PLCM07	+PLCM07U0P1	Plug-in Secure Cloud Connector
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license
PLCM01-CDS	+PLCM01U0P2	Plug-in module CAN + CODESYS V2
PLCM02-CDS	+PLCM02U002	Plug-in module KNX/EIB (TP interface) + CODESYS V2
PLCM05-CDS	+PLCM05U0P1	Plug-in module CODESYS V2
PLIO03	+PLIO03U0P1	I/O Module with 20 DI 24VDC, 12 DO 24VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct
PLIO04	+PLIO04U0P1	I/O Module with 10 DI 24VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100
PLIO06	+PLIO06U0P1	Compact I/O module. 8 DI, 6 DO, 1 Relay Output
PLIO07	+PLIO07U001	Compact I/O module. 2 Relay Outputs

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JSmart Series

When aesthetics and functionality meet, the market changes



- from 5.0" to 21.5" TFT color display,
- up to a resolution 1920x1080 pixel with 16M colors, dimmable backlight
- PCAP Touchscreen Multitouch with swiping and zooming
- 10/100 Ethernet port PoE single cable for power and ethernet
- Wi-Fi Connection
- up to a ARM Cortex-A9 quad core CPU
- Full IP67 protection; ideal for mounting-arm installation right at the machine
- Mounts on 22 mm hole
- Includes environment and motion sensors
- Can be used with cable up to 100 m distance from source

Every once and a while a new product arrives that changes the market. It influences the perspective of all participants by encouraging them to question the status quo. And challenging that which has been done before is when innovation leads to a lasting difference being created.

EXOR International would like to invite you on this journey of imagination and discovery by introducing the JSmart family of **Smart HMI Field Devices**. A product that seems as if from the consumer world of smartphones, tablets and PCs and yet a robust industrial grade product that will last multiple years.

We have worked for many years to redesign nearly 80% of the internal components on the board to accommodate an incredibly beautiful and slim casing. Looking at the product from any angle there is a sense of tranquillity and purity that belies the potent technology that lies beneath.

Up to a quad-core Cortex A9, multi-touch and robust glass front, a full set of motion and environment sensors and wifi interface all add up to provide you with a vast possibility of applications.

Challenge what has come before.

Sold & Serviced By:

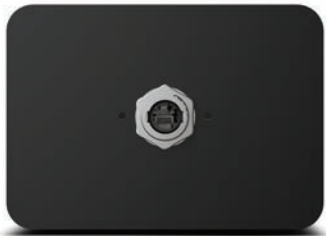
 **ELECTROMATE**

Toll Free Phone (877) SERV098

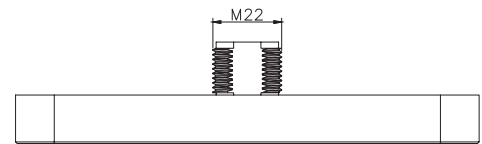
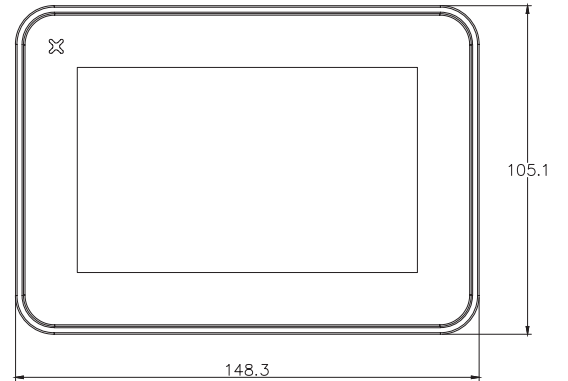
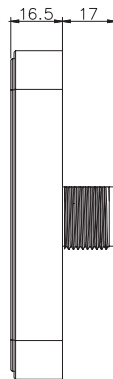
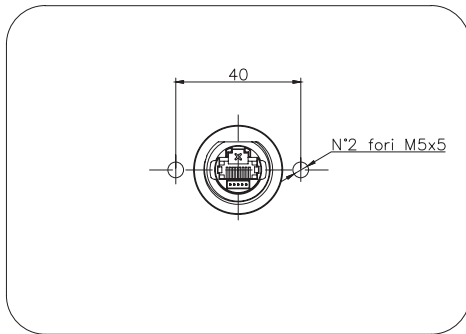
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JSmart705 - Technical Data



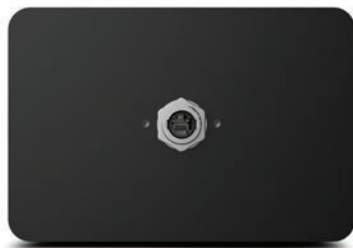
System Resources	
Display - Colors	5" TFT – 16M
Resolution	800x480
Brightness	300 cd/m ² typ.
Dimming	to 0%
Touchscreen	Projected capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3af PoE
Power Consumption	6 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables)
Dimensions and Weights	
Faceplate LxH	148.3x105.1 mm (5.83x 4.13")
Depth D+T+T	16.5 mm (0.06")
Weight	0.5 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201



Ordering Information

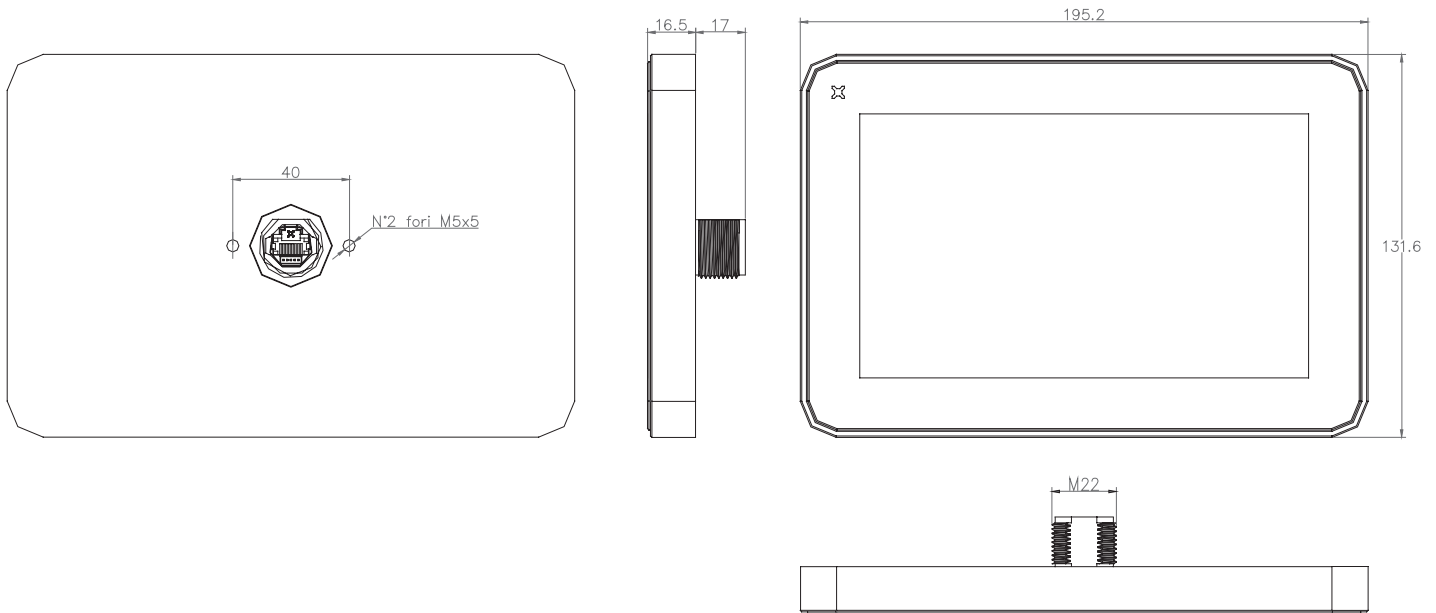
Model	Part Number	Description
JSmart705	+JS705BA0U5P1	Field-ready HMI 5" TFT with PCAP touchscreen

JSmart707 - Technical Data



System Resources	
Display - Colors	7" TFT – 16M
Resolution	1024x600
Brightness	400 cd/m ² typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Wi-Fi*	IEEE 802.11a/b/g
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3af PoE
Power Consumption	9 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables)
Dimensions and Weights	
Faceplate LxH	195.2x131.6 mm (7.68x5.18")
Depth D+T+T	16.5 mm (0.06")
Weight	0.7 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201

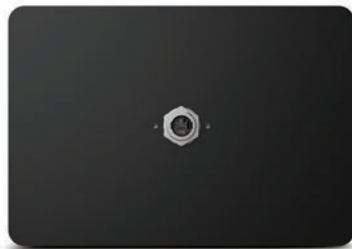
*Awaiting certifications in 2019



Ordering Information

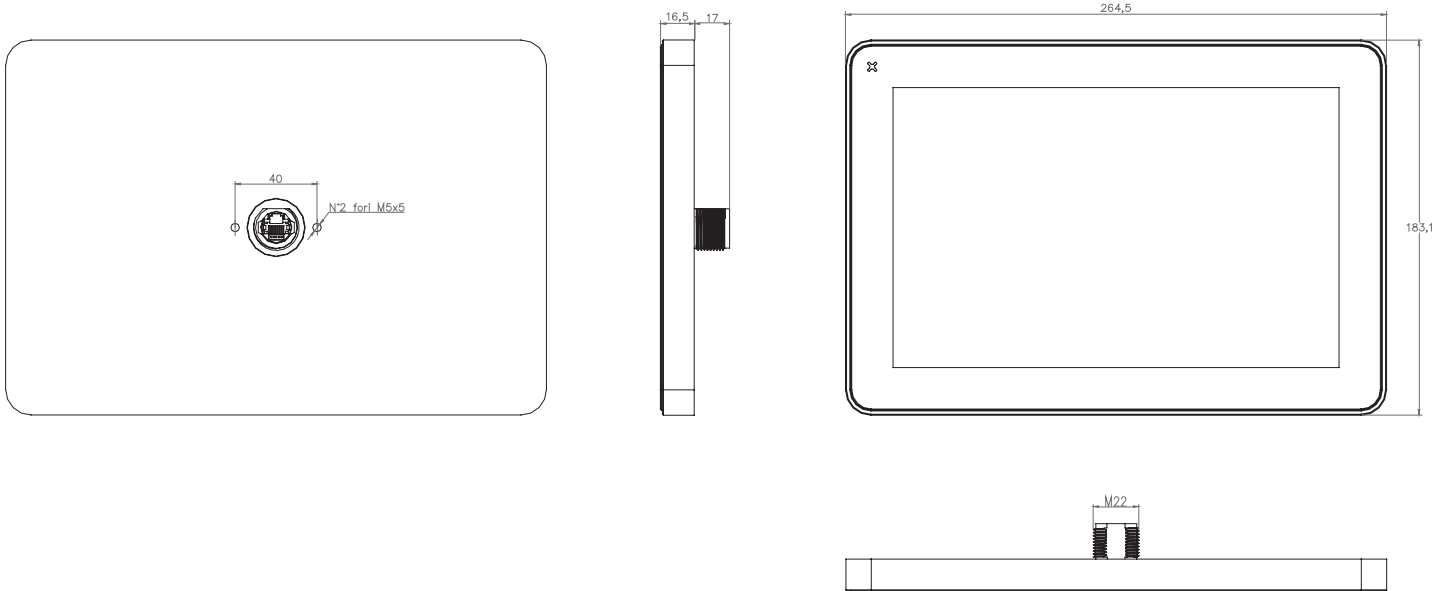
Model	Part Number	Description
JSmart707	+JS707BB0U5P1	Field-ready HMI 7" TFT with PCAP touchscreen, Ethernet port PoE

JSmart710 - Technical Data



System Resources	
Display - Colors	10.1" TFT – 16M
Resolution	1280x800
Brightness	400 cd/m ² typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Wi-Fi*	IEEE 802.11a/b/g
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3af PoE
Power Consumption	12 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables)
Dimensions and Weights	
Faceplate LxH	264.5x183.1 mm (10.41x7.20")
Depth D+T+T	16.5 mm (0.06")
Weight	1.2 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201

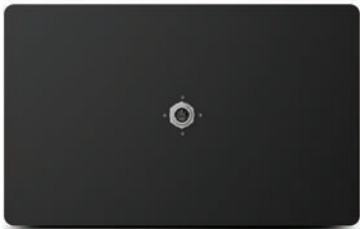
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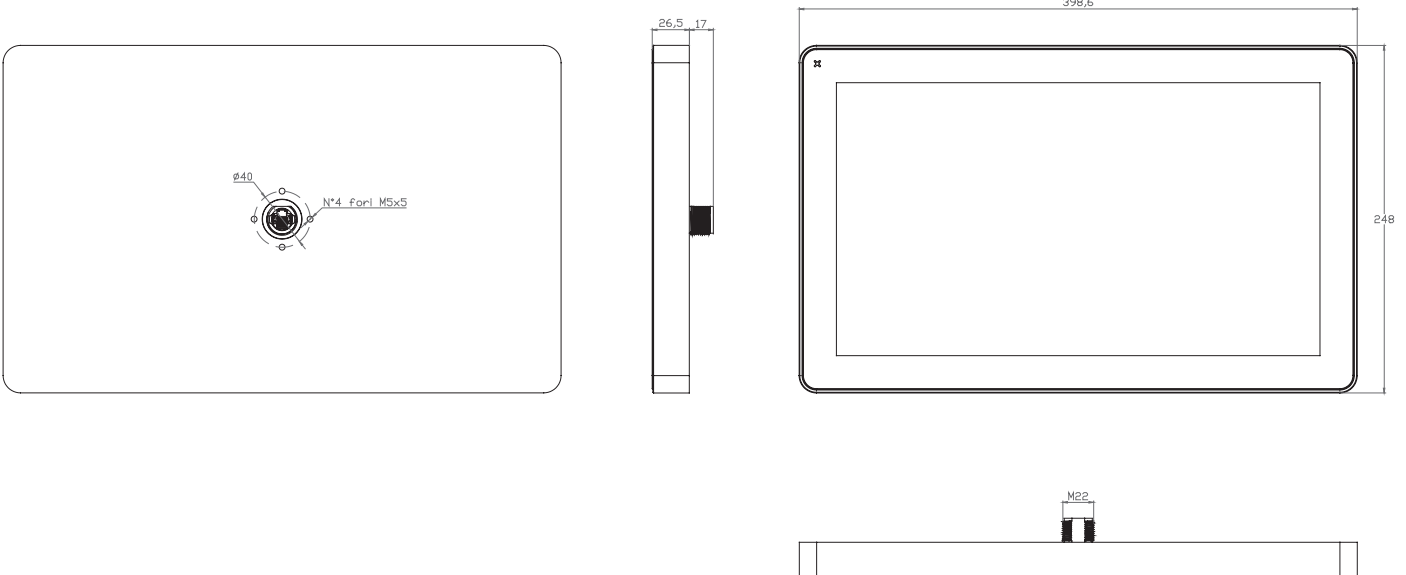
Model	Part Number	Description
JSmart710	+JS710BC0U5P1	Field-ready HMI 10.1" TFT with PCAP touchscreen, Ethernet port PoE

JSmart715 - Technical Data



System Resources	
Display - Colors	15.6" TFT – 16M
Resolution	1366x768
Brightness	400 cd/m ² typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 quad core - 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Wi-Fi*	IEEE 802.11a/b/g
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3at PoE+
Power Consumption	19 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables)
Dimensions and Weights	
Faceplate LxH	398.6x248 mm (15.69x 9.76")
Depth D+T+T	26.5 mm (1.04")
Weight	4.0 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201

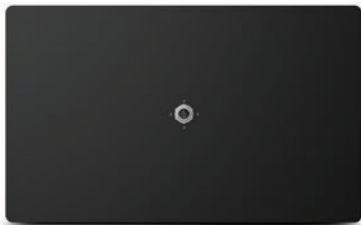
*Awaiting certifications in 2019



Ordering Information

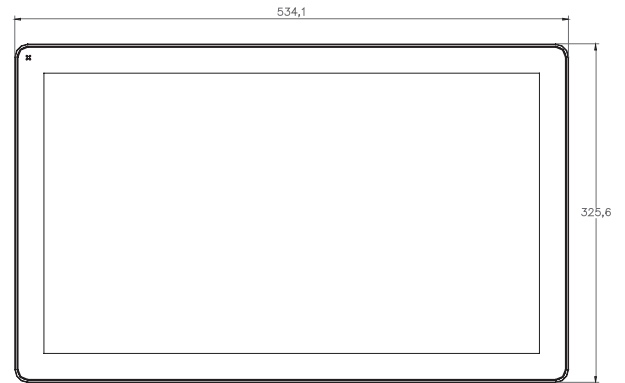
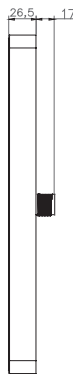
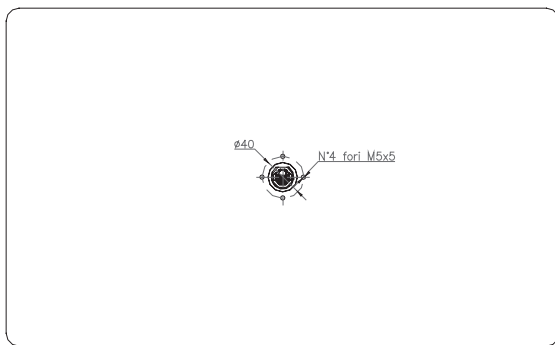
Model	Part Number	Description
JSmart715	+JS715CD0U5P1	Field-ready HMI 15.6" 1366x768 TFT with PCAP touchscreen, Ethernet port PoE

JSmart721 - Technical Data



System Resources	
Display - Colors	21.5" TFT – 16M
Resolution	1920x1080
Brightness	400 cd/m ² typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 quad core - 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Wi-Fi*	IEEE 802.11a/b/g
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3bt 4PPoE
Power Consumption	32 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables)
Dimensions and Weights	
Faceplate LxH	534.1x325.6 mm (21.02x 12.81")
Depth D+T+T	26.5 mm (1.04")
Weight	6.0 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201

*Awaiting certifications in 2019



Ordering Information

Model	Part Number	Description
JSmart721	+JS721CE0U5P1	Field-ready HMI 21.5" 1920x1080 TFT with PCAP touchscreen, Ethernet port PoE



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JSmart Applications

Choose the panel size and technical specifications applicable for your needs

Look through the Application examples provided to help with imagining how to use the JSmart

Consult the pages on brackets, cables and PoE

Enhance the experience of working each day with a new Smart HMI Field



Tube Attachments for JSmart705, 707, 710

Designed for direct tube fitting or more complex curving is required this application will work with the 5,7 and 10 inch panels. IP67 is achievable with this application.



The components you need for this application:

Tube Bracket



Ordering Code: +JSBRU001

Tube Bracket



Ordering Code: +JSBRU002

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

Cable



Choose your solution on p.108

Tube Attachments for JSmart715 and 721

Designed for direct tube fitting or more complex curving is required this application will work with the 15 and 21 inch panels. IP67 is achievable with this application.



The components you need for this application:

Tube Bracket



Ordering Code: +JSBRU002

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

Cable



Choose your solution on p.108

Wall Attachment for JSmart705, 707, 710

When a simple yet sturdy attachment to a wall or cabinet is required, this application is suitable. All without losing the importance the JSmart flat casing. IP67 is achievable with this application.



The components you need for this application:

Wall Bracket



Ordering Code: +JSBRU003

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

Cable



Choose your solution on p.108

Wall Attachment for JSmart715 and 721

When a simple yet sturdy attachment to a wall or cabinet is required, this application is suitable. All without losing the importance the JSmart flat casing. IP67 is achievable with this application.



The components you need for this application:

Wall Bracket



Ordering Code: +JSBRU004

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

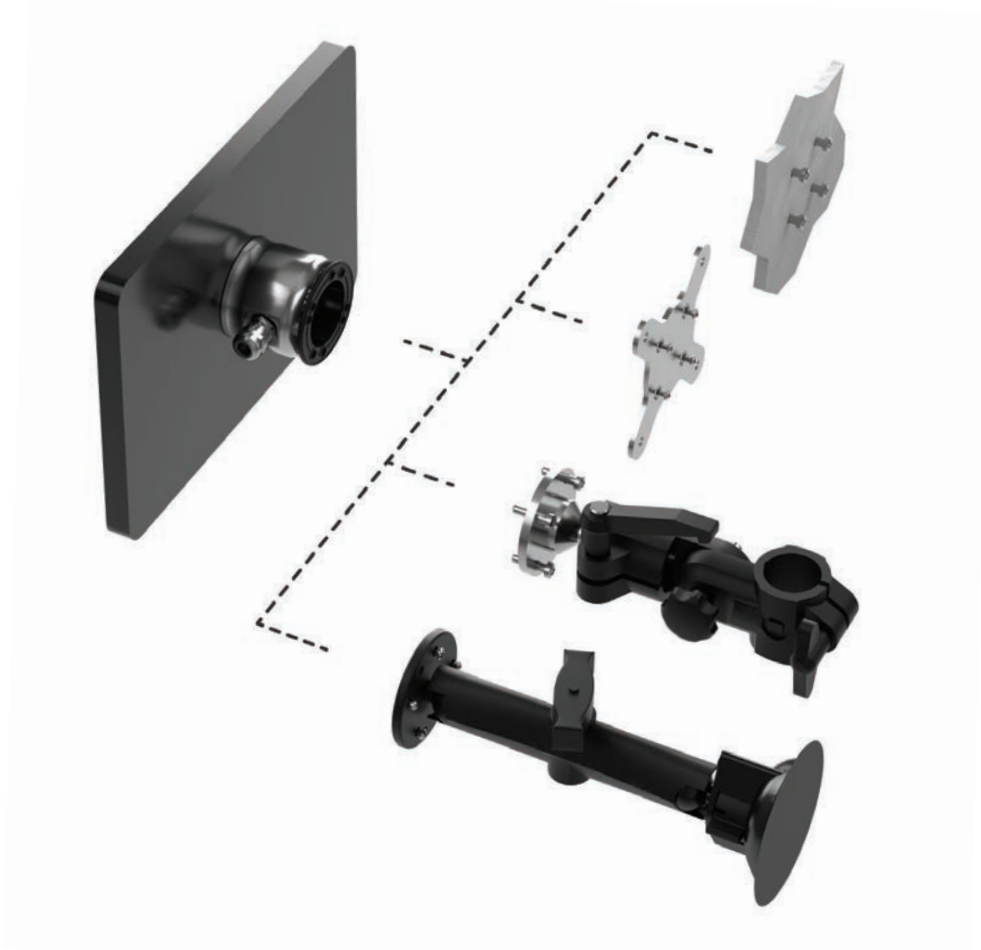
Cable



Choose your solution on p.108

Multi-use Attachments for JSmart705, 707, 710

With some universal types of arms the passage of the ethernet cable is impeded. We provide a side output with a special cable. IP67 is achievable with this application.



The components you need for this application:

**Multi-use Bracket
with cable gland**



Ordering Code: +JSBRU009

**JSmart VESA
for Adapter Bracket**



Ordering Code: +JSBRU008

**PoE Injector
DIN or Panel Mount**



Choose your solution on p.104

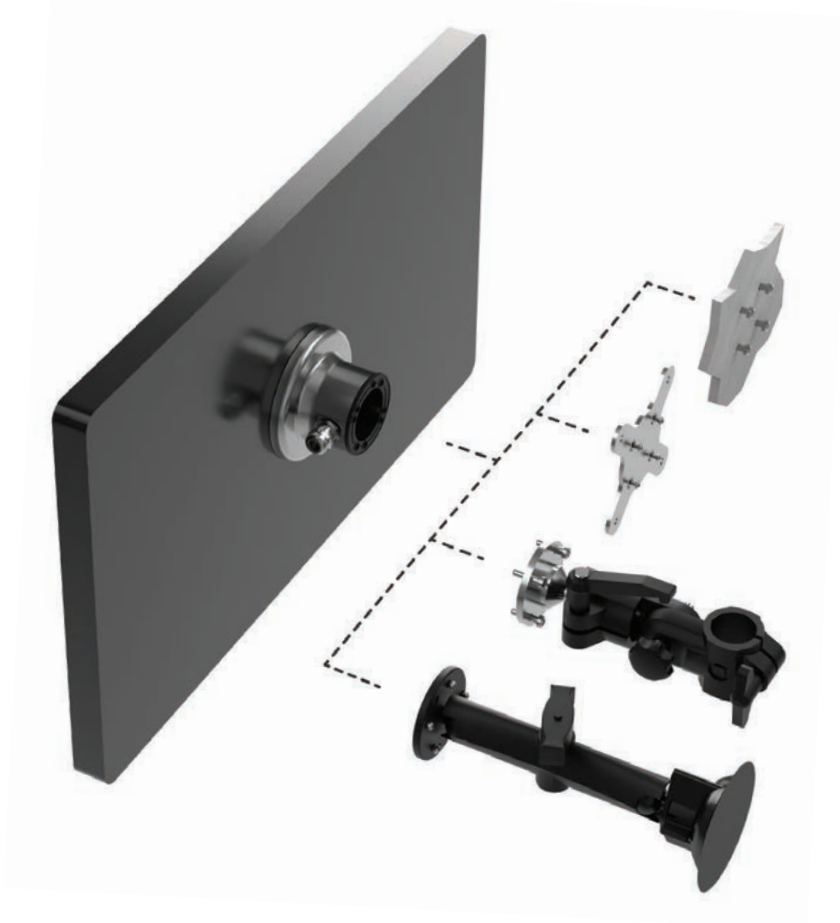
Ethernet Cable



Choose your solution on p.108

Multi-use Attachments for JSmart715 and 721

With some universal types of arms the passage of the ethernet cable is impeded. We provide a side output with a special cable. IP67 is achievable with this application.



The components you need for this application:

**Multi-use Bracket
with cable gland**



Ordering Code: +JSBRU010

**JSmart VESA
for Adapter Bracket**



Ordering Code: +JSBRU008

**PoE Injector
DIN or Panel Mount**



Choose your solution on p.104

Ethernet Cable



Choose your solution on p.108

Table Stand for JSmart all sizes

The JSmart is the quintessential "Stupid Web Browser". Except that it can be used in the heat and dust of the factory floor and last for years. This desktop table stand and USB cable for mouse permits this use in a highly stylish manner. IP67 is achievable with this application.



The components you need for this application:

JSmart Table Stand



Ordering Code: +JSBRU006

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

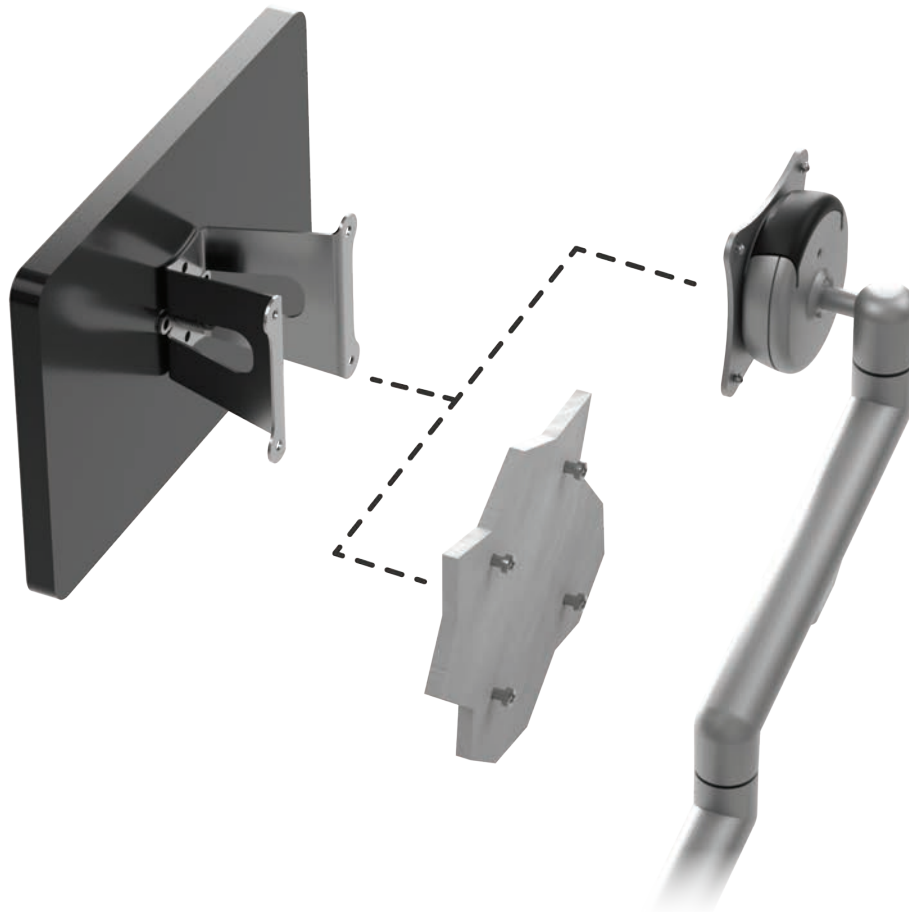
Cable PoE - USB



Ordering Code: +JSCAU003

VESA Attachment for JSmart all sizes

In the very basic of situations where there is no need for the cable to be passed through the wall, this bracket can be used. IP67 is achievable with this application.



The components you need for this application:

JSmart VESA Bracket



Ordering Code: +JSBRU005

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

Cable



Choose your solution on p.108

Gooseneck Attachment for JSmart705, 707, 710

The gooseneck permits the JSmart to be used in many different situations, far away from the industrial environment.



The components you need for this application:

Gooseneck Bracket



Ordering Code: +JSBRU007

PoE Injector
DIN or Panel Mount



Choose your solution on p.104

JSmart Accessories

Sold & Serviced By:



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PoE Injectors

You can choose between the JSmart PoE Injector DIN rail mounting and the JSmart PoE Injector Panel mounting.

JSmart PoE Injector
DIN rail mounting



Ordering Code: +JSPOU0P1

JSmart PoE Injector
Panel mounting



Ordering Code: +JSPOU0P2

Sold & Serviced By:

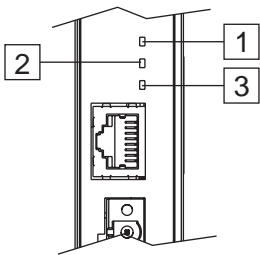
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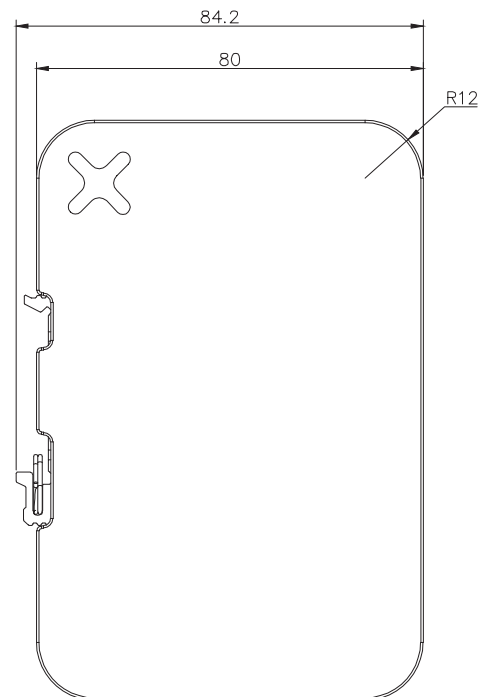
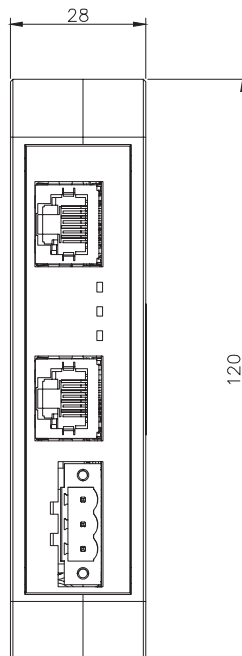
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JSmart PoE Injector DIN rail mounting - Technical Data



LED	Color	Specifications
1	Red	Fault
2	Green	Status: PoE running
	Red, slow blink	Status: Over-load
	Red, fast blink	Status: Over-temperature
3	Green	Power ON



Features	
PoE Standard	IEEE 802.3af/at
Output Power	36W max
DC Output Voltage	+54 VDC
Data rates	10/100
Interface	
Ethernet IN port	10/100
Ethernet OUT port	10/100 PoE
Diagnostic LEDs	3
Ratings	
Power Supply	+24 VDC (18-32 VDC)
Current Consumption	2.0 A at 24 VDC (max.)
Efficiency	80% typ
Over Voltage / Current Protection	Yes
Short Circuit Protection	Yes
Reverse Polarity	Yes
Environment Conditions	
Operating Temp	-20°C to +55° C
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP20 EN60529
Dimensions and Weights	
Faceplate LxH	80x120 mm
Depth D	28 mm
Weight	350 g
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
cULus	cULus: UL61010-1 / UL61010-2-201

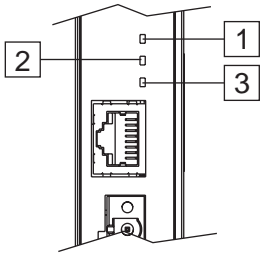
Ordering Information

Model	Part Number	Description
JSmart PoE	+JSPOU0P1	JSmart PoE Injector DIN rail mounting

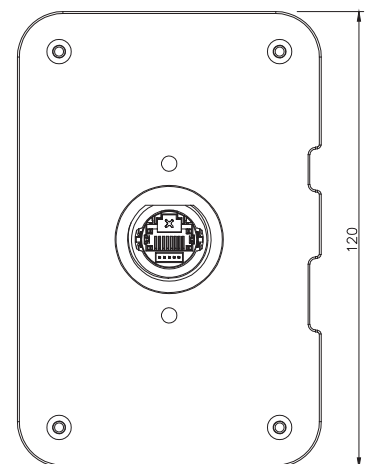
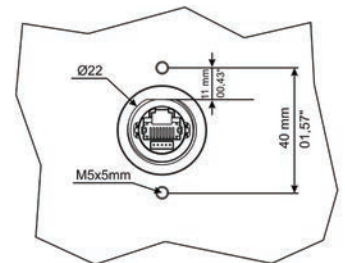
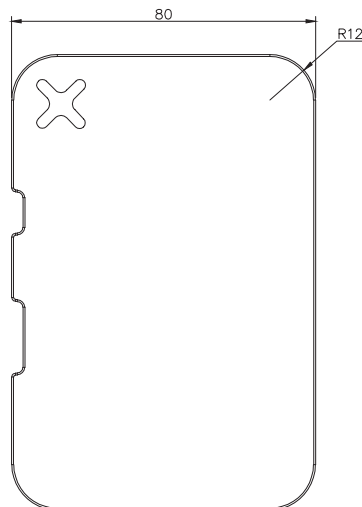
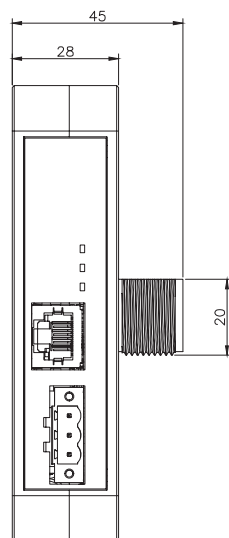
JSmart PoE Injector panel mounting - Technical Data



Features	
PoE Standard	IEEE 802.3af/at
Output Power	36W max
DC Output Voltage	+54 VDC
Data rates	10/100
Interface	
Ethernet IN port	10/100
Ethernet OUT port	10/100 PoE
Diagnostic LEDs	3
Ratings	
Power Supply	+24 VDC (18-32 VDC)
Current Consumption	2.0 A at 24 VDC (max.)
Efficiency	80% typ
Over Voltage / Current Protection	Yes
Short Circuit Protection	Yes
Reverse Polarity	Yes
Environment Conditions	
Operating Temp	-20°C to +55°C
Storage Temp	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 EN60529 front cabinet
Dimensions and Weights	
Faceplate LxH	80x120 mm
Depth D	28 mm
Weight	350 g
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
cULus	cULus: UL61010-1 / UL61010-2-201



LED	Color	Specifications
1	Red	Fault
2	Green	Status: PoE running
	Red, slow blink	Status: Over-load
3	Red, fast blink	Status: Over-temperature
	Green	Power ON




Ordering Information

Model	Part Number	Description
JSmart PoE	+JSP0U0P2	JSmart PoE Injector Panel mounting

Tube Brackets

Tube Bracket


37 mm distance from tube, 48 mm tube fitting, all gasket and screws included, IP67 rated



Ordering Code: +JSBRU001

Tube Bracket

50 mm distance from tube, 48 mm tube fitting, all gasket and screws included, IP67 rated



Ordering Code: +JSBRU002

Brackets for JSmart 705, 707, 710

Wall Bracket


50 mm distance from wall, all gasket and screws included, IP67 rated



Ordering Code: +JSBRU003

Multi-use Bracket with cable gland

50 mm distance from wall, all gasket and screws included, IP67 rated*



Ordering Code: +JSBRU009

*Awaiting certification in 2019

Brackets for JSmart 715, 721

Wall Bracket


50 mm distance from wall, all gasket and screws included, IP67 rated



Ordering Code: +JSBRU004

Multi-use Bracket with cable gland

50 mm distance from wall, all gasket and screws included, IP67 rated*



Ordering Code: +JSBRU010

*Awaiting certification in 2019

Cables

Cable 90° PoE - 5 m



Ordering Code: +JSCAU001

Cable PoE - USB - 5 m



Ordering Code: +JSCAU003

Cable PoE - 5 m



Ordering Code: +JSCAU002

Cable PoE - 5 m

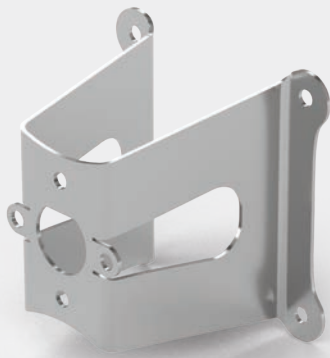


Ordering Code: +JSCAU004

Others

JSmart VESA Bracket

70 mm from wall, all gasket and screws included



Ordering Code: +JSBRU005

JSmart Table Stand

use for desktop, 51.7 mm high, perfect height for ease of use



Ordering Code: +JSBRU006

Gooseneck Bracket

570 mm height, multi plane flexibility, IP20 rated



Ordering Code: +JSBRU007

JSmart VESA for Adapter Bracket



Ordering Code: +JSBRU008



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Industrial PC

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EPC - Entry-level Panel PC

EXOR fanless Panel PC adopts an all-in-one concept that integrates a single board computer, TFT LCD Panel with LED backlight, and user-friendly touch screen within a sleek and compact IP65 chassis.

Designed to serve as a flexible and reliable industrial computing platform, each Panel PC and Monitor is a compact, highly integrated, network-ready computer with exceptional I/O connectivity. The industrial-grade machinery computer from EXOR is designed for use in any light industrial environments.



Overview

All products are available in wide and flexible range of configurations. You will have the product that fits your needs.

All products have a robust mechanical construction that will suit the most demanding of applications.

Products can be configured with a different choice of CPU, RAM, disk and operating systems.

PC offered by EXOR International are the ideal system for running applications based on JMobile PC Runtime.

An application integrating HMI on a powerful hardware platform is ready in all cases where the embedded HMIs do not meet all requirements.

eTOP-EPC0840T - Technical Data



Panel

- LCD size: 8", 4:3
- Resolution: SVGA 800 x 600
- Luminance: 400 cd/m²
- Contrast ratio: 500
- LCD color: 262K
- Viewing angle: 50(U), 70(D), 70(L), 70(R)
- Backlight: LED

Touch screen

- 5-wire resistive (flush panel type)
- Touch light transmission: 82%
- Touch interface: USB

System

- CPU: on-board Intel® Atom™ dual core processor E3826, 1.46GHz, 1M
- L2 cache
- BIOS: AMI BIOS
- System memory: 1x 204-pin DDR3L SO-DIMM socket, 2GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x external locked CFast socket
 - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 1 x mini-PCIe socket1 (support optional Wi-Fi, 3.5G module or fieldbus card)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 3 x USB 2.0; 1 x USB 3.0
- Power switch
- Remote power switch
- Reset button
- COM #1: RS232/422/485

- COM #2: RS232/422/485
- Fieldbus: (protocol interface optional)

Audio

- HD codec: realtek ALC886-GR
- Audio interface: Line-out audio jack

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

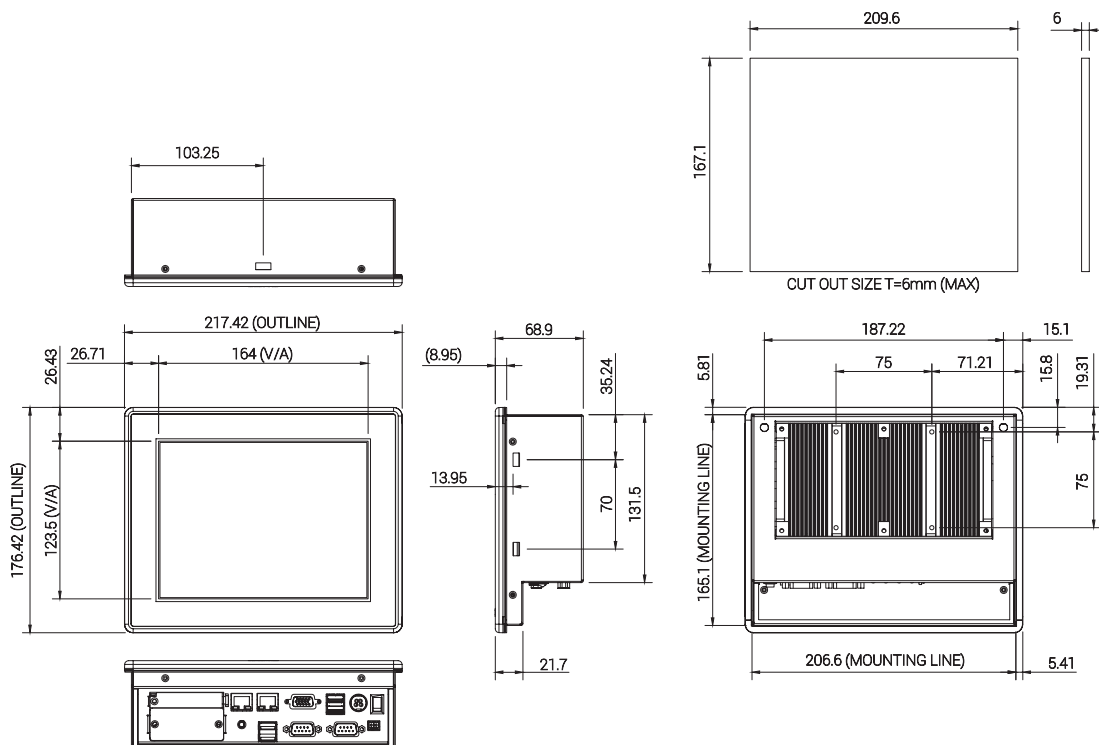
- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 75mm x 75mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 217.4x176.4x68.9mm
- Weight: 2.3Kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 IoT 32bit/64 bit
- Windows 7 32-bit/64-bit



Ordering Information

Model	Part Number	Description
eTOP-EPC0840T	+71EPC0840T	8" TFT SVGA 4:3 Flush Panel PC with Intel® Atom™ E3826, 1.46GHz, Touch Screen, 2GB DDR3L, 4x USB, 2x COM and VGA

eTOP-EPC1240T - Technical Data



Panel

- LCD size: 12.1", 4:3
- Resolution: SVGA 800 x 600
- Luminance: 500cd/m²
- Contrast ratio: 700
- LCD color: 16.7M
- Viewing angle: 65 (U), 75 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.42GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device: 1 x External locked CFast socket
- 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

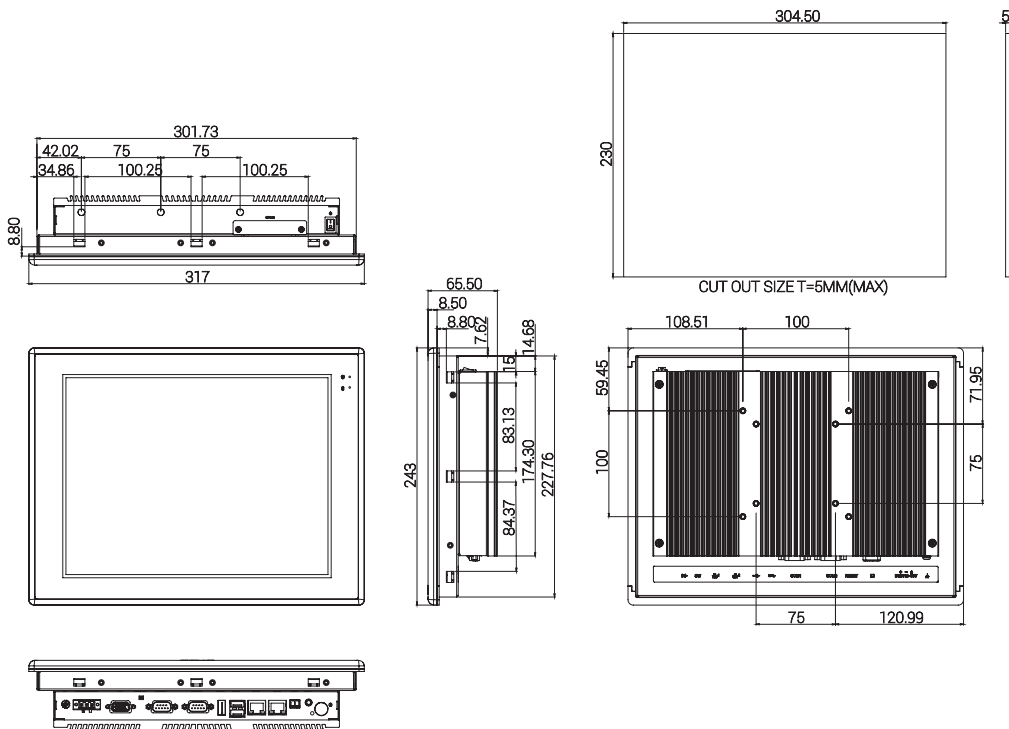
- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400\C\RAL
- 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C~60°C
- Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- limits to be at 90% RH at max 50°C
- Dimension: 317 x 243 x 65.5 mm
- Weight: 3.6Kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 IoT 32bit/64 bit



Ordering Information

Model	Part Number	Description
eTOP-EPC1240T	+71EPC1240TJ	12.1" TFT SVGA 4:3 Flush Panel PC with Celeron® J1900, up to 2.42GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-EPC1540T - Technical Data



Panel

- LCD size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 450cd/m2
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 70 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900 processor, up to 2.42GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x external locked CFast socket
 - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- PS2 keyboard/mouse
- Power switch
- Reset button
- 2-pin remote power on/off switch

- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible Applied Panel PC & Monitor

Mechanical & Environment

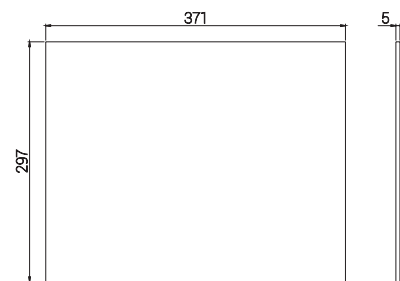
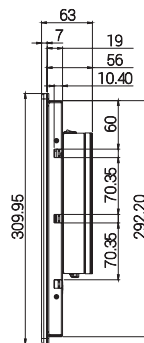
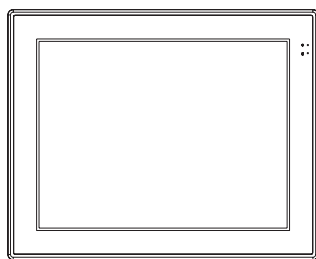
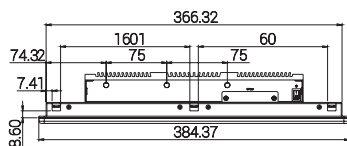
- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 384.37 x 309.95 x 63.2 mm
- Weight: 5.1 Kg

Certifications

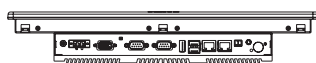
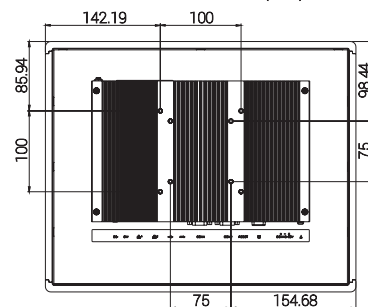
- CE approval
- FCC Class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 IoT 32bit/64 bit



CUT OUT SIZE=5MM (MAX)



Ordering Information

Model	Part Number	Description
eTOP-EPC1540T	+71EPC1540TJ	15" TFT XGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.42GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-EPC1740T - Technical Data



Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.42GHz, 2M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x external locked CFast socket
 - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C) H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- PS2 keyboard/mouse
- Power switch
- Reset button
- 2-pin remote power on/off switch

- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx
- Ethernet compatible

Mechanical & Environment

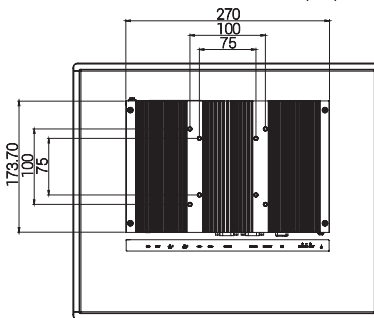
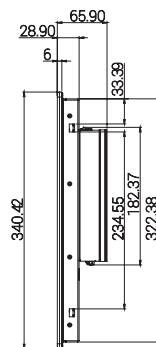
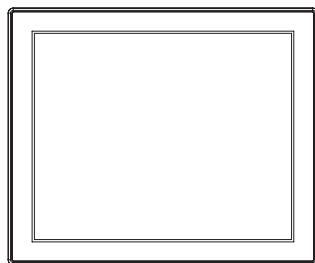
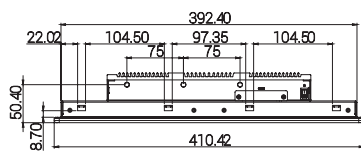
- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)- 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 410.4 x 340.4 x 65.9mm
- Weight: 6.7 Kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 IoT 32bit/64 bit



Ordering Information

Model	Part Number	Description
eTOP-EPC1740T	+71EPC1740TJ	17" TFT SXGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.42GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-EPC1940T - Technical Data



Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to
- 2.42GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
 - 1 x External locked CFast socket
 - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch

- COM #1: RS232/422/485 w/2.5kv isolated
- COM #2: RS232/422/485 w/2.5kv isolated

Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out
- Ethernet
- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

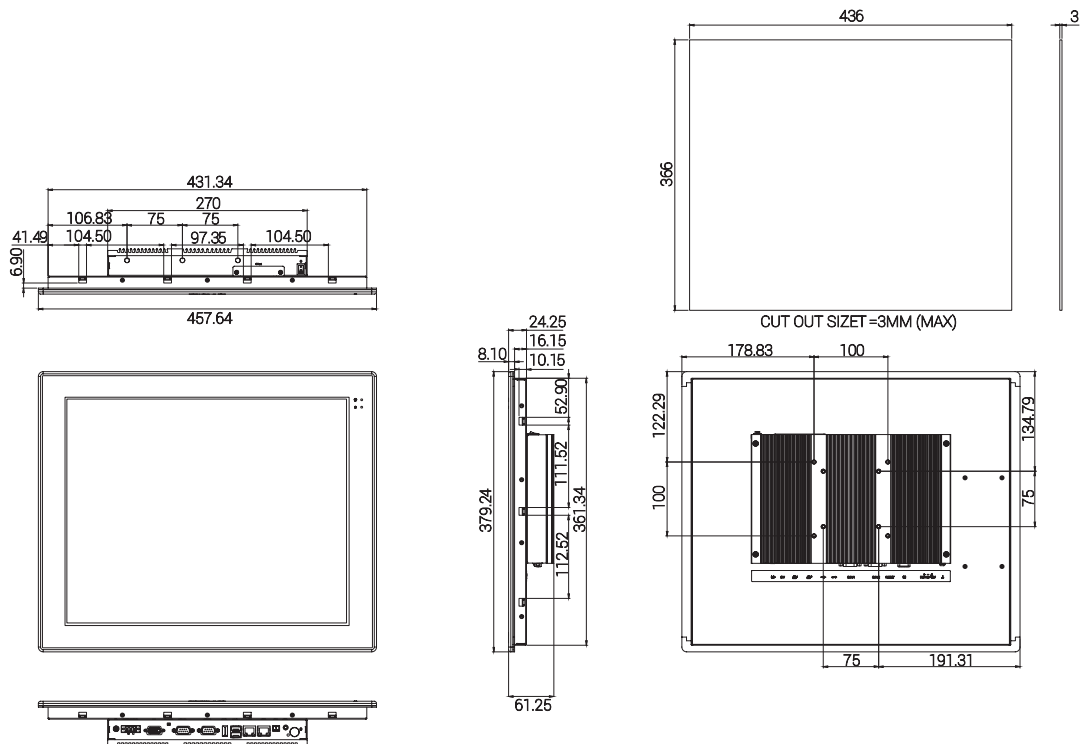
- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C~50°C
- Storage temperature: -20°C~60°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- limits to be at 90% RH at max 50°C
- Dimension: 457.64 x 379.24 x 61.25 mm
- Weight: 6.3Kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 IoT 32bit /64 bit



Ordering Information

Model	Part Number	Description
eTOP-EPC1940T	+71EPC1940TJ	19" TFT SXGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.42GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

IPC - High-end Panel PC

EXOR heavy Industrial Panel PC is equipped with powerful Intel® Processor, TFT LCD Panel with LED backlight, and user-friendly touch design.

EXOR Industrial Panel PC provides expansion slots for add-on boards in a IP66 heavy-duty aluminum front bezel and vibration-resistant, its rugged design of aluminum chassis is suitable for any harsh industrial environments.



Overview

All products are available in wide and flexible range of configurations. You will have the product that fits your needs.

All products have a robust mechanical construction that will suit the most demanding of applications.

Products can be configured with a different choice of CPU, RAM, disk and operating systems.

PC offered by EXOR International are the ideal system for running applications based on JMobile PC Runtime.

An application integrating HMI on a powerful hardware platform is ready in all cases where the embedded HMIs do not meet all requirements.

Sold & Serviced By:

 **ELECTROMATE**

Toll Free Phone (877) SERV098

www.electromate.com

sales@electromate.com

eTOP-IPC1040P - Technical Data



Panel

- LCD size: 10.1", 16:9
- Resolution: WXGA 1280 x 800
- Luminance: 300cd/m2
- Contrast ratio: 1300:1
- LCD color: 262K
- Viewing angle: 85 (U), 85 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 90%
- Anti-scratch surface: 7H hardness
- Touch interface: USB
- System
- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz,
- 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/ W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED indicator to show operating status

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/off switch
- Power switch

- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

Mechanical & Environment

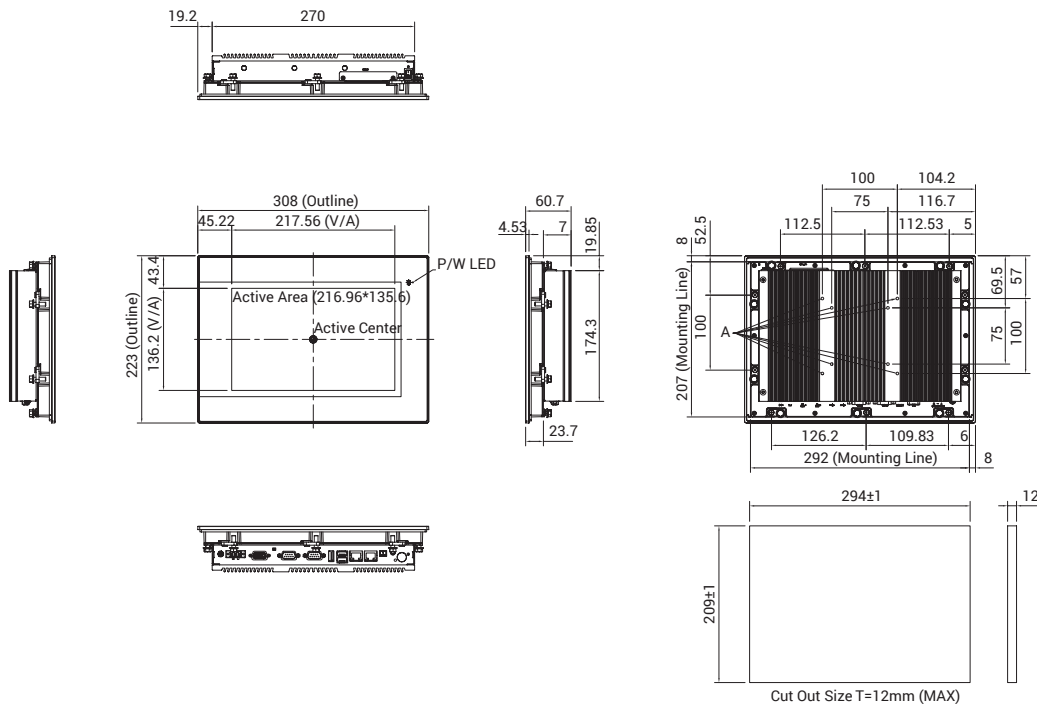
- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
- HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 308 x 223 x 60.7mm
- Weight: 3.7Kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1040P	+72IPC1040P	10.1" TFT WXGA 16:9 Heavy Industrial Panel PC with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz, Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-IPC1640P - Technical Data



Panel

- LCD size: 15.6", 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 400cd/m²
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz,
- 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/ W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED indicator to show operating status

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/off switch
- Power switch

- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack

Ethernet

- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

Mechanical & Environment

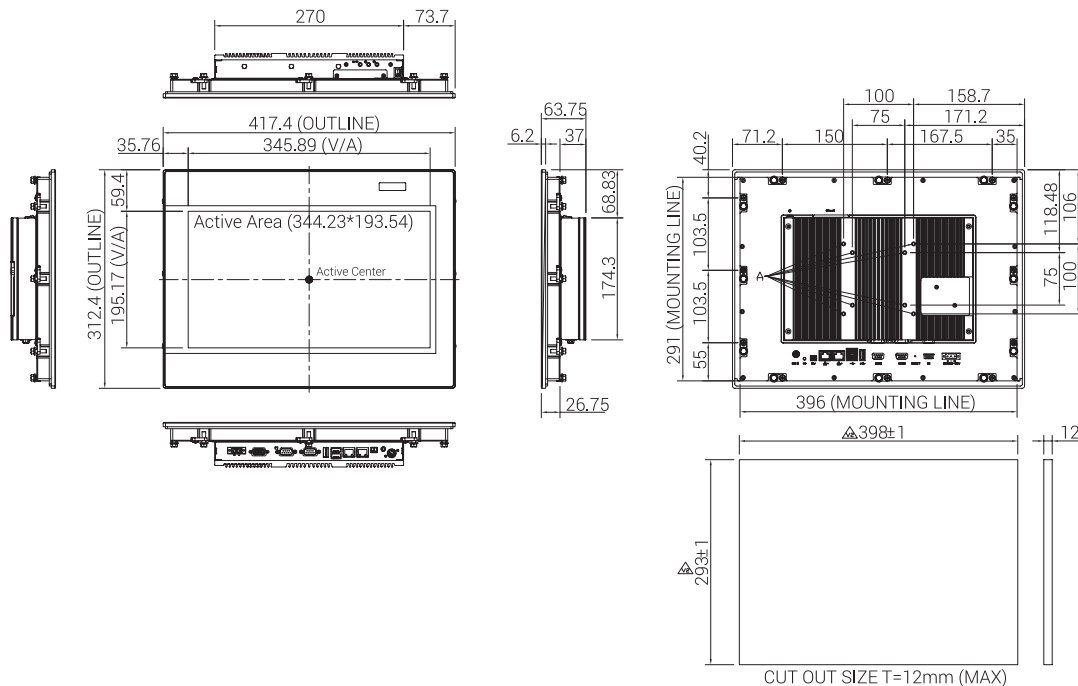
- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.4 x 312.4 x 63.75mm
- Weight: 6.4Kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1640P	+72IPC1640P	15.6" TFT WXGA 16:9 Heavy Industrial Panel PC with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz, Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-IPC1840P - Technical Data



Panel

- LCD size: 18.5", 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 300cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB
- Windows 8 compliance

System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz,
- 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1x External locked CFast socket
 - 1x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module or fieldbus card)
- Panel backlight control button: increase brightness/decrease brightness/backlight on/off
- Front logo LED indicator to show operating status

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0

- 2-pin remote power on/off switch
- Power switch
- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated
- Fieldbus: (protocol interface optional)

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack
- Ethernet
- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

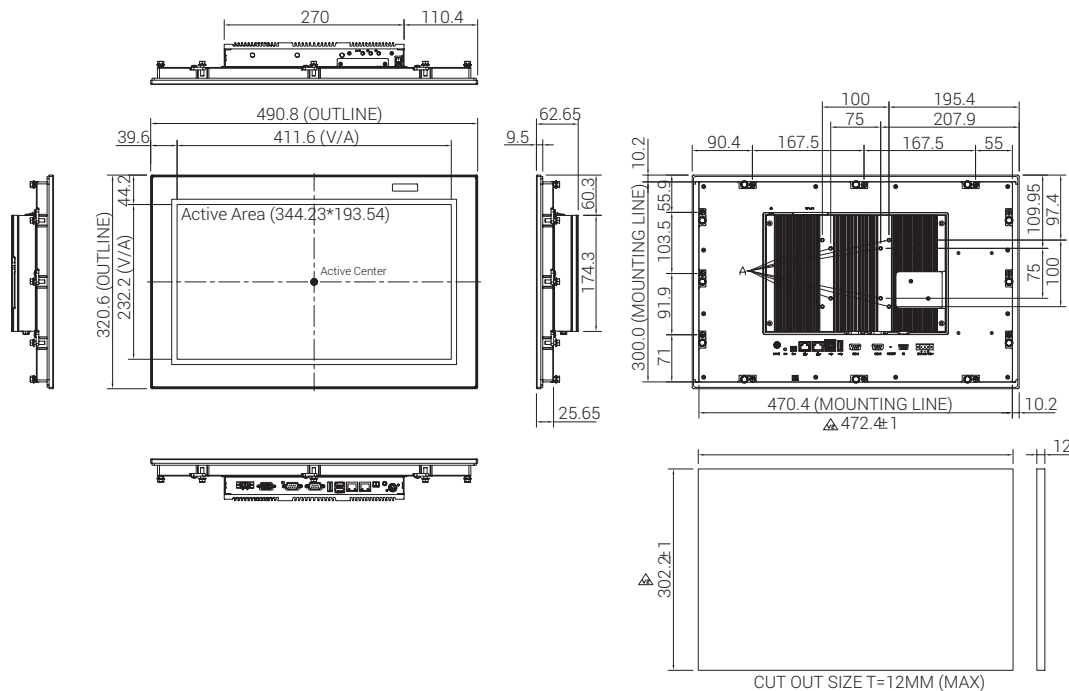
- Color: Pantone 425C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
 - Operating temperature: -10°C to 60°C
 - Storage temperature: -20°C to 75°C
 - Operating humidity: 10%~90% relative humidity, non-condensing
 - Dimension: 490.8 x 320.6 x 62.65mm
 - Weight: 8.2Kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1840P	+72IPC1840P	18.5" TFT WXGA 16:9 Heavy Industrial Panel PC with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz, Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM and Fieldbus PortM and Fieldbus Port

eTOP-IPC2140P - Technical Data



Panel

- LCD size: 21.5", 16:9
- Resolution: Full HD 1920x1080
- Luminance: 300cd/m²
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED
- Touch
- Ten points P-Cap (Projected Capacitive Touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz,
- 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 4GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
 - 1 x external locked CFast socket
 - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED Indicator to show operating status

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/ off switch
- Power switch

- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack
- Ethernet
- LAN chip: dual Intel® I210AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

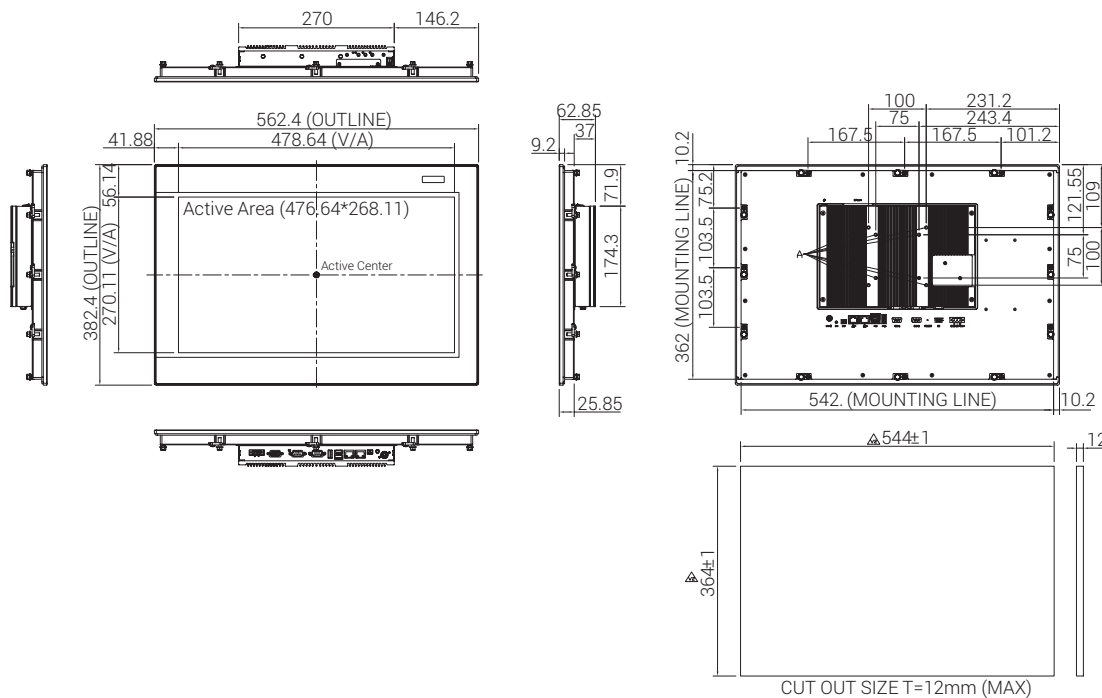
- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~30VDC
- Power adapter: Optional AC to DC power adapter (+12V, 60W)
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 562.4x382.4x62.85mm
- Weight: 9.26Kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC2140P	+72IPC2140P	21.5" TFT WXGA 16:9 Heavy Industrial Panel PC with Intel® Celeron® quad core processor J1900, up to 2.42GHz, Multi-Touch Screen, 8GB DDR3L, 3 x USB, 2 x COM

eTOP-IPC1670P - Technical Data



Panel

- LCD size: 15.6", 16:9
- Resolution: WXGA, 1366 x 768
- Luminance: 300cd/m²
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 87%
- Interface: USB
- Anti-scratch surface: >= 6H hardness

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
 - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
 - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
 - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
 - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
 - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
 - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
 - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)(for DC model only)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage

Expansion:

- 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/NVRAM/mSATA storage)
- 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
- 1 x PCI and 1 x PCIe x4 slots
- 2 x PCIe x4 slots
- 2 x PCI slots
- 1 x PCIe x16 slot

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection (for T/P-DC only)
- ATX power switch (for T/P-DC only)

Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection (for T/P-DC only)

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack
- Ethernet
- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power: IPC1670P
 - Power input: 12~30 VDC
 - Power connector: 3-pin PHOENIX connector
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
 - Resistive: -10°C to 50°C
 - P-Cap: -10°C to 50°C
 - Storage temperature: -20°C to 75°C
 - Operating humidity: 10%~90% relative humidity, non-condensing (for IPC1670P series, limits to be at 90% RH at max 50°C)

Dimension

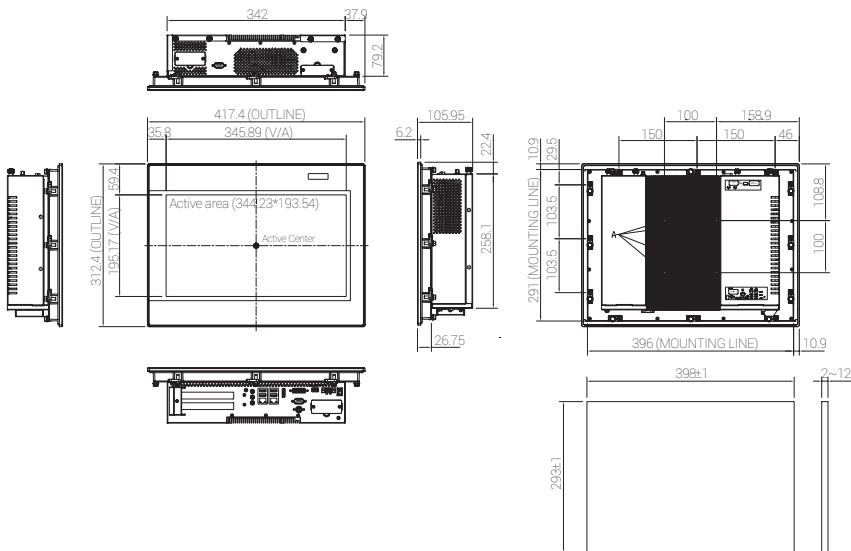
- 417.4 x 312.4 x 105.95mm
- Weight: (barebone): 9.18kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

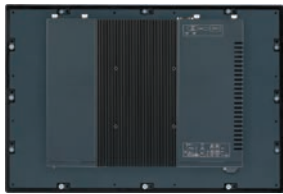
- Windows 7 32-bit and 64-bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 32-bit and 64-bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1670P	+72IPC1670P	15.6" TFT WXGA 16:9 Heavy Industrial Panel PC with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz, Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

eTOP-IPC2170P - Technical Data



Panel

- LCD size: 21.5", 16:9
- Resolution: Full HD, 1920 x 1080
- Luminance: 300cd/m²
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89(U), 89(D), 89(L), 89(R)
- Backlight: LED
- Touch (for eTOP-IPC2170P Series)
- Ten points P-Cap (projected capacitive touch)
- Light transmission: 87%
- Interface: USB
- Anti-scratch surface: >= 6H hardness

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family,
- LGA1150 socket type
- Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
- Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
- Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
- Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
- Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
- Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
 - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)(for DC model only)

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
 - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/NVRAM/mSATA storage)
 - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
 - 1 x PCI and 1 x PCIe x4 slots
 - 2 x PCIe x4 slots
 - 2 x PCI slots
 - 1 x PCIe x16 slot

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mlic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection (for T/P-DC only)
- ATX power switch (for T/P-DC only)

Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection (for T/P-DC only)

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

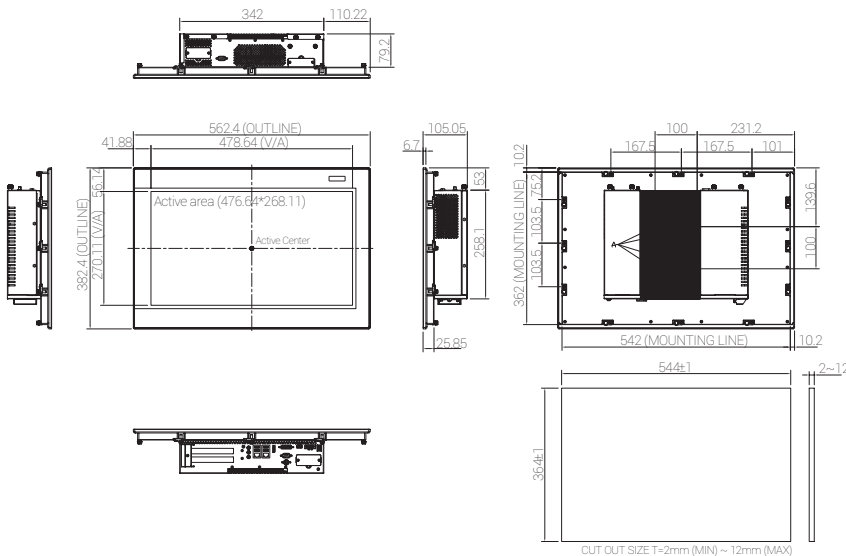
- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power: eTOP-IPC2170P
- Power input: 12~30 VDC
- Power connector: 3-pin PHOENIX connector
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
 - Resistive: -10°C to 50°C
 - P-Cap: -10°C to 50°C
 - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for eTOP-IPC2170P series, limits to be at 90% RH at max 50°C)
- Dimension: 562.4 x 382.4 x 105.05mm
- Weight: (barebone): 11.7kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

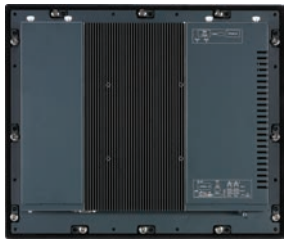
- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC2170P	+72IPC2170P	21.5" TFT Full HD 16:9 Heavy Industrial Panel PC 4th Generation Intel® Core™ i Processor

eTOP-IPC1570T - Technical Data



Panel

- LCD Size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 450cd/m²
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 70 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family,
 - LGA1150 socket type
 - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
 - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
 - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
 - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
 - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
 - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/ DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
 - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C) H/W status monitor: monitoring system temperature and voltage
- Expansion:
 - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/NVRAM/mSATA storage)
 - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
 - 1 x PCI and 1 x PCIe x4 slots
 - 2 x PCIe x4 slots
 - 2 x PCI slots
 - 1 x PCIe x16 slot
 - 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

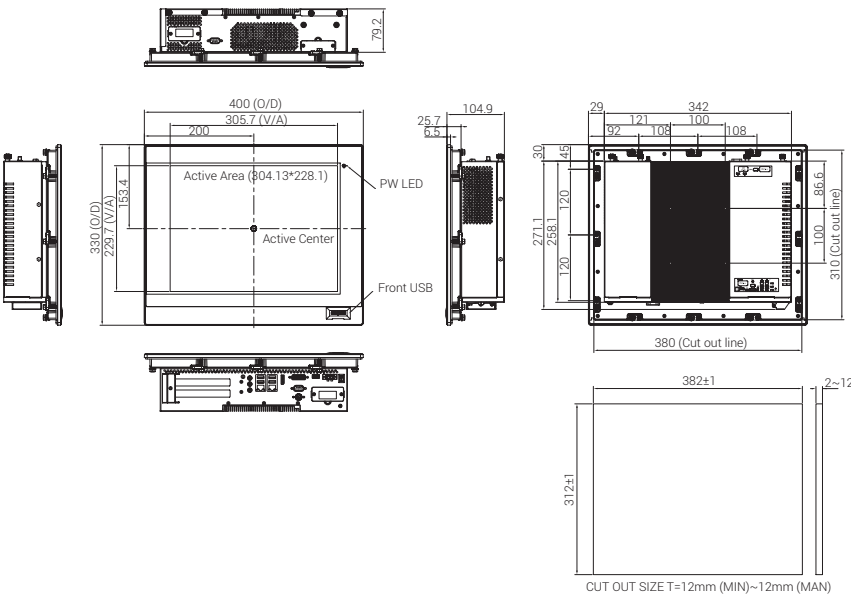
- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
 - Power input: 12~30 VDC
 - Power connector: 3-pin PHOENIX connector
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature
- Resistive: -20°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for eTOP-IPC1570T series, limits to be at 90% RH at max 50°C)
- Dimension: 400 x 330 x 104.9 mm
- Weight: 8.99kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

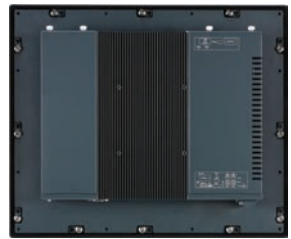
- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1570T	+72IPC1570T	15" TFT XGA 4:3 Heavy Industrial Panel PC 4th Generation Intel® Core™ i Processor

eTOP-IPC1770T - Technical Data



Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family,
 - LGA1150 socket type
 - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
 - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
 - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
 - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
 - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
 - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
 - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
 - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/NVRAM/mSATA storage)
 - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
 - 1 x PCI and 1 x PCIe x4 slots
 - 2 x PCIe x4 slots
 - 2 x PCI slots
 - 1 x PCIe x16 slot
 - 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

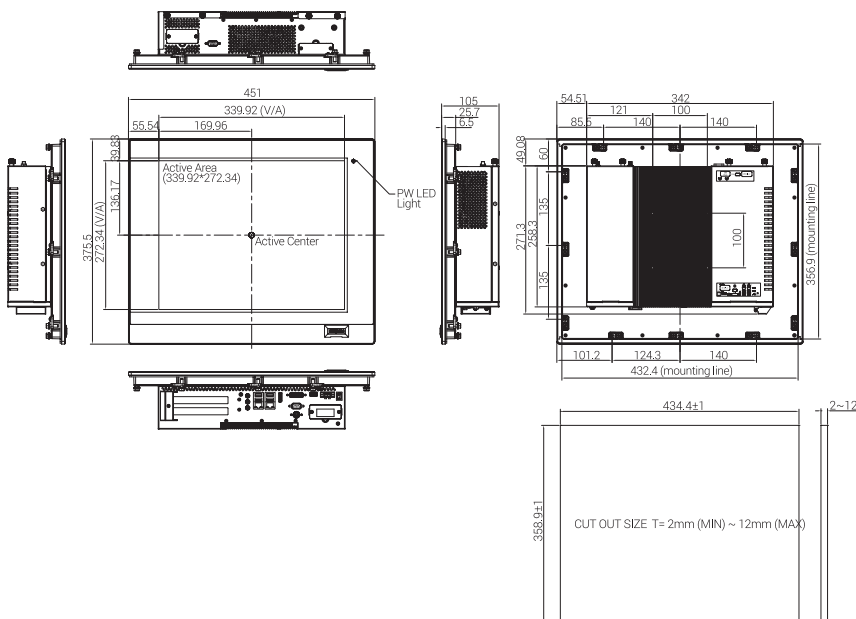
- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
 - Power input: 12~30 VDC
 - Power connector: 3-pin Phoenix connector
 - Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
 - Shock:
 - IEC 68 2-27
 - HDD: 20G @ wall mount, half sine, 11ms
 - Operating temperature:
 - Resistive: -10°C to 50°C
 - Storage temperature: -20°C to 75°C
 - Operating humidity: 10%~90% relative humidity, non-condensing (for eTOP-IPC1770T series, limits to be at 90% RH at max 50°C)
 - Dimension: 451 x 375.5 x 105mm
 - Weight: 9.6kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

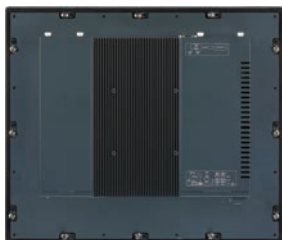
- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1770T	+72IPC1770T	17" TFT SXGA 4:3 Heavy Industrial Panel PC 4th Generation Intel® Core™ i Processor

eTOP-IPC1970T - Technical Data



Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 80±3%
- Interface: USB

System

- CCPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
- Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
- Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
- Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
- Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
- Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
- Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
 - 1 x External locked CFast socket
 - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
 - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable

- by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
 - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/NVRAM/mSATA storage)
 - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
 - 1 x PCI and 1 x PCIe x4 slots
 - 2 x PCIe x4 slots
 - 2 x PCI slots
 - 1 x PCIe x16 slot
 - 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

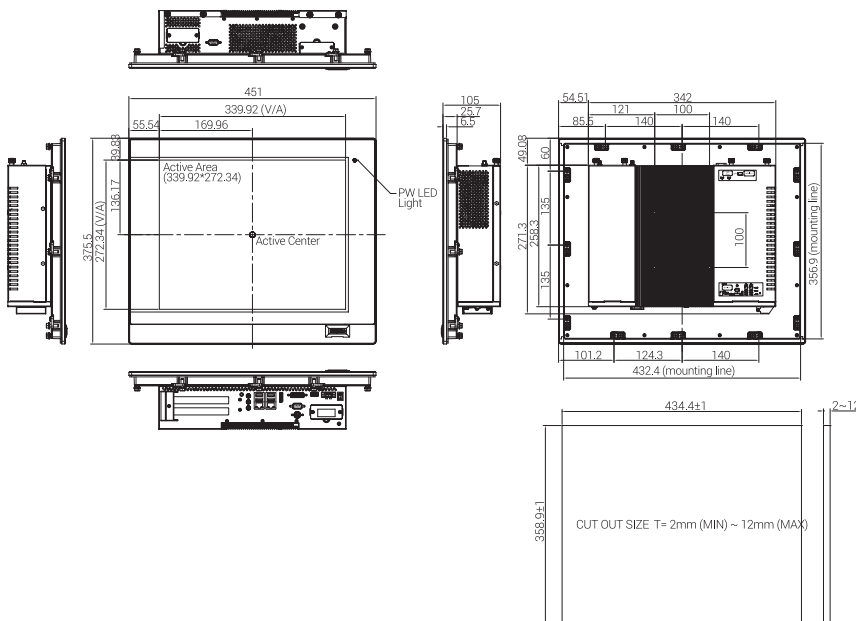
- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
 - Power input: 12~30 VDC
 - Power connector: 3-pin PHOENIX connector
- Vibration:
 - IEC 68 2-64 (w/ HDD)
 - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
 - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
 - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - IEC 68 2-27
 - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
 - Resistive: -10°C to 50°C
 - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for eTOP-IPC1970T series, limits to be at 90% RH at max 50°C)
- Dimension: 470 x 400 x 104.9 mm
- Weight: 10.25kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eTOP-IPC1970T	+72IPC1970T	19" TFT SXGA 4:3 Heavy Industrial Panel PC 4th Generation Intel® Core™ i Processor

eCC / eCCF - Compact box computers

Powered by Intel®, these compact box computers feature significant I/O design.

The compact series fanless computer is ideal for space-critical and simple or complex applications, such as data acquisition, digital signage, gate control, self-service system, Kiosk, and POS applications.



Overview

All products are available in wide and flexible range of configurations. You will have the product that fits your needs.

All products have a robust mechanical construction that will suit the most demanding of applications.

Products can be configured with a different choice of CPU, RAM, disk and operating systems.

PC offered by EXOR International are the ideal system for running applications based on JMobile PC Runtime.

An application integrating HMI on a powerful hardware platform is ready in all cases where the embedded HMIs do not meet all requirements.

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eCC105 - Technical Data



CPU Support

- Onboard Intel Atom® processor E3826 Dual Core, 1.46GHz
- Support Intel Atom® E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display HDMI and DVI-D
- HDMI and VGA (via DVI-I to VGA converter)

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing LEDs
- 1 x External CFast socket
- 1 x SIM card holder
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control Jumper-free setting on RS232/422/485
- Support 5V/12V/Ring function by jumper setting, ring as the default (COM2 only)
- 1 x Remote power on/off switch
- 1 x 2-pin DC input, support +9 to 30VDC input (nominal DC input: 24V)

I/O Interface - Rear

- 1 x USB 2.0
- 1 x HDMI
- 1 x RTC battery
- 2 x DB9 for COM3 & COM4 support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G modules

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast (SATA 2.0)
- 1 x 2.5" HDD (SATA 2.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G modules

Power Requirement

- Power input: +9VDC to +30VDC (nominal DC input: 24V)
- 1 x Optional 24V, 60W power adapter

Support OS

- Windows 7 Pro , 32bit/64bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows 10 IoT , 32bit/64bit
- Linux Kernel version 3.8.0

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction

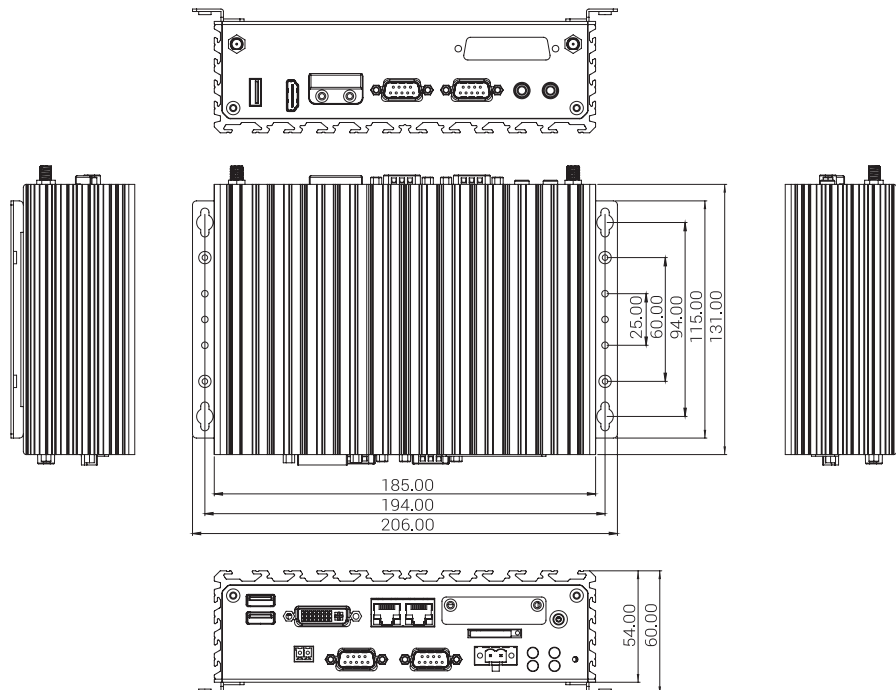
- Aluminum and metal chassis with fanless design

Environment

- Operating temperature: Ambient with air flow: -5°C to 55°C with industrial grade device (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection: HDD: 20G, half sine, 11ms, IEC60068-2-27
- CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition: Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
- Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition: Random: 2Grms @ 5~500Hz, IEC60068-2-64
- Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL



Ordering Information

Model	Part Number	Description
eCC105	+70ECC105	Intel Atom® Processor E3826 Dual Core Fanless System

eCC106 - Technical Data



CPU Support

- Onboard Intel® Pentium® Quad Core processor N3710, 2M Cache, 1.6GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1600 8GB RAM max., un-buffered and non-ECC

Display Option

- 1 x HDMI + 1 x DVI-D + 1 x DP display port

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programming/4 x Tx/Rx LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI + 1 x DVI-D display output
- 4 x USB 3.0 (900mA per each)
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Rear

- 1 x DisplayPort
- 1 x SIM card holder
- 1 x External CFast socket
- 2 x DB9 for RS232/422/485 with auto flow control (COM1 and COM2)
- 2 x DB9 for RS232 (COM3 and COM4)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Remote power on/off switch
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G/LTE/ NEXCOM's automation module output

I/O Interface - Internal

- 4 x GPI and 4 x GPO (5V, TTL type)

Storage Device

- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G modules

Power Requirement

- Power input: +9 to 30 VDC
- 1 x Optional 24V, 60W power adapter

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction

- Aluminum chassis with fanless design

Environment

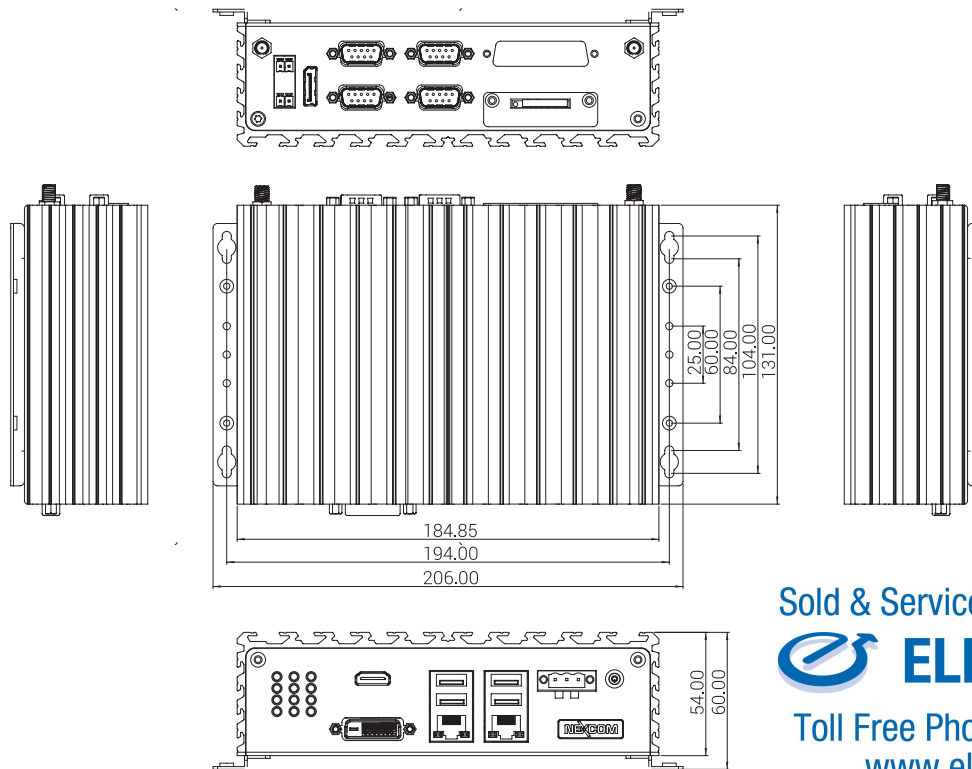
- Operating temperature:
 - Ambient with air flow: -5°C to 55°C
 - (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
 - HDD: 20G, half sine, 11ms, IEC60068-27
 - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ HDD condition:
 - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
 - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Support OS

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Sold & Serviced By:



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Ordering Information

Model	Part Number	Description
eCC106	+70ECC106	Intel® Pentium® processor N3710 Quad Core, 1.6GHz fanless system

eCC3600E - Technical Data



CPU Support

- Support 3rd generation Intel® Core i7/i5/i3 rPGA socket type processor
- Core™ i5-3610ME, Dual Core, 2,7GHz, 3M Cache, Max Turbo Frequency 33 GHz
- Core™ i3-3120ME, Dual Core, 2,4GHz, 3M Cache
- Celeron (B810), Dual Core, 1,6 Ghz, 2M Cache
- Support three independent display with above processors
- Turbo-boost disabled by default

Main Memory

- 2 x DDR3 SO-DIMM socket, supports up to 8GB DDR3 DDR3L 1333/1600 SDRAM, with un-buffered and non-ECC

Display Option

- Three independent display (only support on 3rd generation Processor)
 - Two display port and 1 x VGA
 - Two display port and 1 x DVI-D
- Dual independent display
 - VGA and DVI-D
 - Display port and VGA
 - Display port and DVI-D
 - Display port and display port
- I/O Interface-Front
 - ATX power on/off switch
 - HDD access/power status LEDs
 - 2 x USB 30 ports (blue color)
 - 2 x Display port (can be converted to DVI-D or HDMI via active cables)
 - 2 x Antenna holes
 - 1 x External CFast
 - 1 x SIM card socket

I/O Interface-Rear

- 2 x DB9 for COM5 & COM6 (RS232)
- 1 x DB44 serial port for 4 x COM port
- COM1/COM3/COM4: RS232
- COM2: RS232/422/485
- 2 x Intel® GbE LAN ports (Intel® 82574L and 82579LM); support WoL, teaming and PXE
- 2 x USB 20 ports
- 2 x USB 30 ports (blue color)
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x Line-out and 1 x Mic-in
- 2-pin remote power on/off switch

- +9V to 30VDC input
- Storage Device
- 1 x CFast socket
- 1 x 2.5" SATA HDD or 2 x SATA DOM
- SATA DOM: support 90°C horizontal type only

Expansion Slot

- One PCIe4 expansion slot
- Add-on card length: 169mm max.
- Power consumption: 10W/slot max.
- 1 x mini-PCIe socket (support optional Wi-Fi or 3.5G module)

Power Requirements

- ATX power mode
- Onboard DC to DC power support from 9V to 30VDC
- Optional power adapter

Dimensions

- 215mm (W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 4.5")

Construction

- Aluminum Chassis with fanless design

Environment

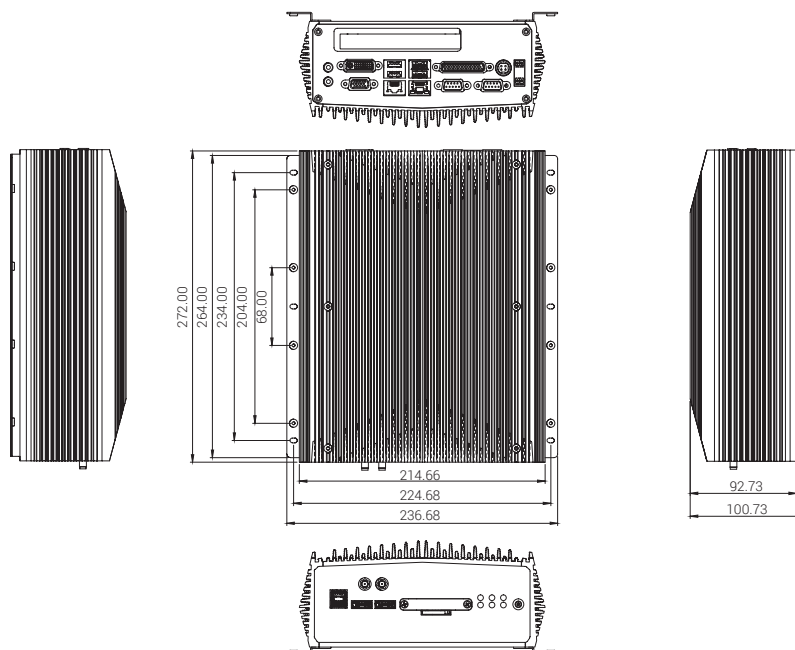
- Operating temperature: Ambient with air flow: -5°C to 55°C Ambient with air flow: -5°C to 50°C if using Core™ i7-3612QM (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 95% at 40°C
- Shock protection:
 - HDD: 20G, half sine, 11ms, IEC60068-2-27
 - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition
 - Random: 0.5Grms @ 5~500Hz according to IEC60068- 2-64
 - Sinusoidal: 0.5Grms @ 5~500Hz according to IEC60068-2-6

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows XP Pro, 32bit/64bit
- Windows 7 PRO, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Ordering Information

Model	Part Number	Description
eCC3600E	+70ECC3600E	3rd Generation Intel® Core™ i7/i5/i3 Fanless System with one PCIe x4 Expansion

eCC3800E - Technical Data



CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache
- Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache
- Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache
- Intel® Pentium® Processor G4400TE 2.4GHz, 3M Cache
- Intel® Celeron® Processor G3900TE 2.3GHz, 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 16GB with unbuffered an non-ECC

Display Option

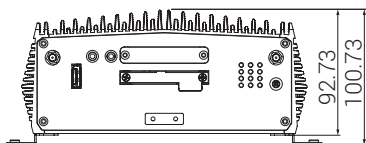
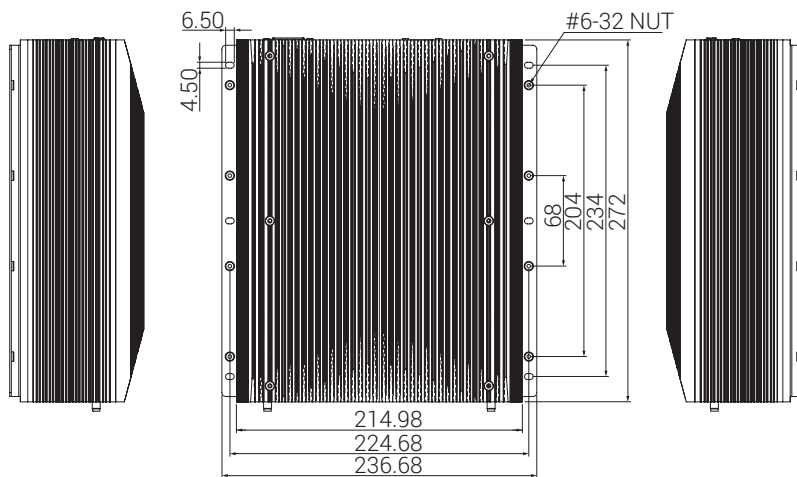
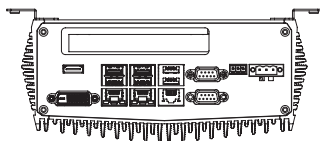
- Three independent display
- HDMI + DP+ DVI-D
- Dual independent display
- HDMI + DP
- HDMI + DVI-D
- DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket
- 1 x SIM card holder



Rear I/O Interface

- 2 x DB9 for COM1 & COM2
- COM1: RS232/422/485 auto flow control
- COM2: RS232/422/485 auto flow control
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switc
- +9V to 30V DC input

Storage Device

- 1 x M.2 (SATA 3.0)
- 1 x mSATA (SATA 3.0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- One PCIe x4 expansion slot
- Add-on card length: 169mm max.
- Power consumption: 10W/slot max.
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/ mSATA/
- Fieldbus

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24VDC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
- Ambient with air flow: -5°C to 55°
- (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
- HDD: 20G, half sine, 11ms, IEC60068-27
- M.2: 50G, half sine, 11ms, IEC60068-27
- Vibration protection with HDD condition:
- Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
- Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit

Weight Information

- Gross weight: 5.9 kg
- Net weight: 4.5 kg

Sold & Serviced By:



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Ordering Information

Model	Part Number	Description
eCC3800E	+70ECC3800E	6th Generation Intel® Core™ i7/i5/i3 LGA Fanless System with Expansion

eCCF105 - Technical Data



CPU Support

- Onboard Intel® Atom™ x5-E3930 processor Dual Core 1.8GHz

Main Memory

- On-board type 4GB DDR3L RAM
- Un-buffered and non-ECC

Display Output

- 1 x HDMI display

I/O Interface-Front

- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0 (900mA)
- 1 x External SD card slot (data storage only)
- 1 x Power/1x HDD access LEDs
- 1 x Battery low/1x GPO programming LED
- 2 x Tx/Rx LEDs
- 1 x ATX power on/off switch

I/O Interface-Top

- 1 x Remote switch/1 x S3
- 1 x SIM card slot
- 1 x RTC battery socket

I/O Interface-Bottom

- 2 x DB9, support RS232/422/485 with Auto Flow Control
- 1 x Optional DB9, support 4 x GPI and 4 x GPO

Storage Device

- Onboard 16GB eMMC
- Optional mSATA module

Power Requirement

- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimensions

- 46.2mm (W) x 100mm (D) x 120mm (H)

Construction

- Aluminum and Metal Chassis with front access design

Environment

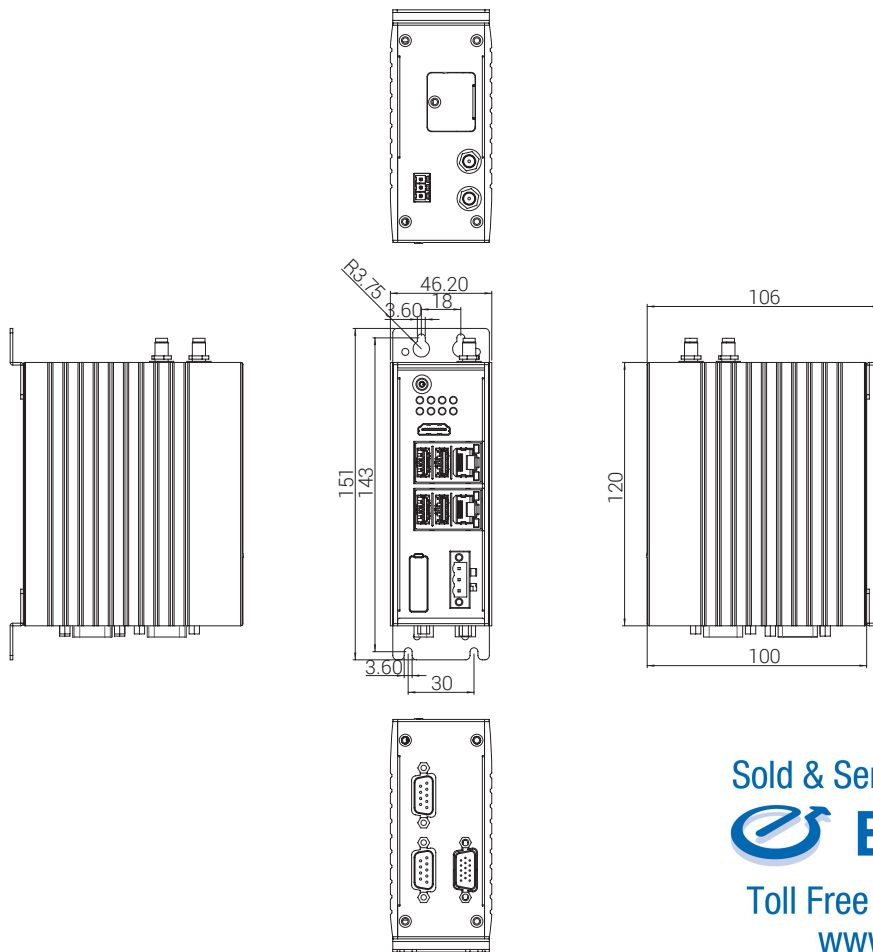
- Operating temperature: Ambient with air flow: -5°C to 55°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection: -mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition: -Random: 2Grms @ 5~500 Hz, IEC60068-2-64 -Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval
- EN61000-6-2
- EN61000-6-4
- FCC Class A

Support OS

- Windows 10 IoT, 32bit/64bit



Sold & Serviced By:



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Ordering Information

Model	Part Number	Description
eCCF105	+70ECCF105	Intel® Atom™x5-E3930 Dual Core Factory Automation Fanless System with Palm Size form Factor

eCCF200 - Technical Data



CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC
- Display Option
- Dual independent display -DVI-I and DP

I/O Interface-Front

- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/ Rx, 5x programmable GPO LEDs
- 1 x External SD card
- 1 x SIM card holder
- 2 x Intel® I210AT GbE LAN ports, support WoL, teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 3 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 support auto flow control
 - Jumper-free setting on RS232/422/485
 - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with ±20% range

Storage Device

- 1 x 2.5" SSD/HDD (SATA 2.0) - front accessible
- 1 x SD card (data storage only)
- 1 x mSATA

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/ fieldbus modules

Power Requirement

- Typical 24V DC input with ±20% range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

Dimensions

- 85mm (W) x 157mm (D) x 214mm (H)

Construction

- Aluminum and metal chassis with fanless design

Environment

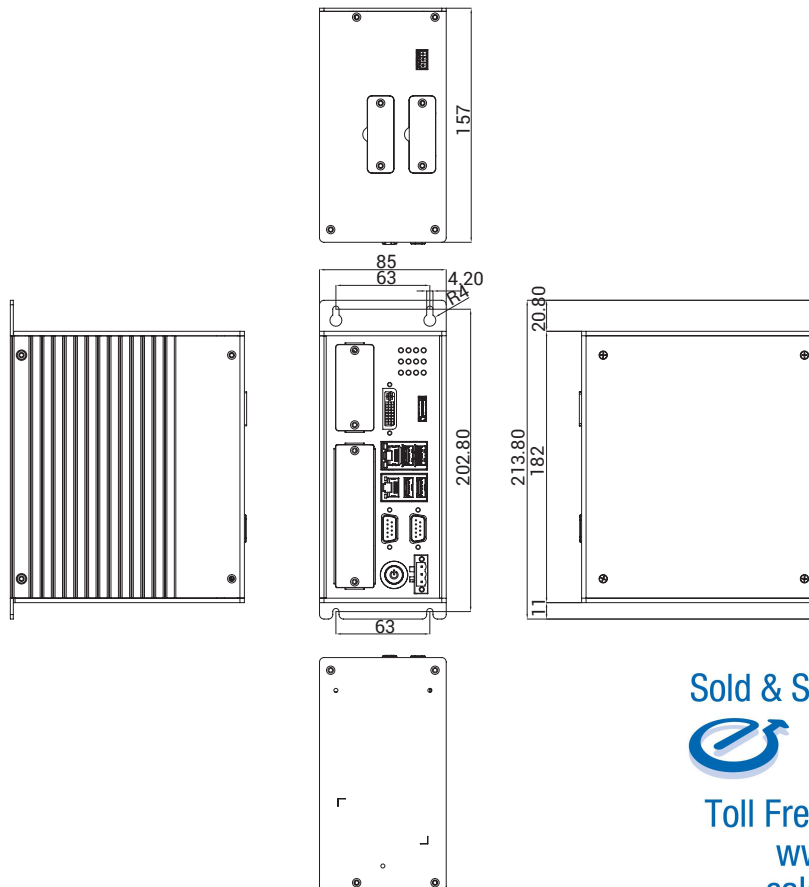
- Operating temperature: Ambient with air flow: -5°C to 55°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
 - HDD: 20G, half sine, 11ms, IEC60068-2-27
 - SSD: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ SSD condition:
 - Random: 2Grms @ 5~500Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

Certifications

- CE approval
 - EN61000-6-2
 - EN61000-6-4
- FCC Class A
- LVD
- UL60950

Support OS

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



Sold & Serviced By:



Toll Free Phone (877) SERV098

www.electromate.com

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Ordering Information

Model	Part Number	Description
eCCF200	+70ECCF200	Intel® Celeron® J1900 Quad Core 2.0GHz Factory Automation Fanless System with Fieldbus Expansion Ability

eCCF300 - Technical Data



CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type processors
 - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache (maximum frequency 3.4GHz if turbo boost enabled)
 - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache (maximum frequency 3.3GHz if turbo boost enabled)
 - Core™ i3-6100TE, Quad Core, 2.7GHz, 4M Cache (no turbo boost)
 - Pentium G4400TE, Dual Core, 2.4GHz, 3M Cache (no turbo boost)
 - Celeron® G3900TE, Dual Core, 2.3GHz, 2M Cache (no turbo boost)

Main Memory

- 2 x DDR4 SO-DIMM socket, supports 2133MHz and up to 8GB with un-buffered and non-ECC type

Display Option

- Dual independent display -HDMI + DVI-D

Front I/O Interface Status LEDs

- 1 x Battery/1 x C-Fast LEDs
- 4 x GPO status/2 x Tx/Rx LEDs
- 1 x Power/1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI and 1 x DVI-D
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for Wi-Fi/ GSM
- 1 x Front access 2.5" HDD tray
- 1 x mini-PCIe expansion support optional modules
- 2 x RS232/422/485 auto with 2.5KV Isolation
- 3 x Intel® I210IT GbE LAN ports, support WoL, teaming and PXE

Top I/O Interface

- 1 x 3-pin remote switch
- 1 x CFast expansion
- 1 x SIM card

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (external, SATA 3.0)
- 1 x 2.5" HDD (internal, SATA 3.0)
- 1 x mSATA (via internal mini-PCIe socket)

Expansion Slot

- eCCF300: no expansion
- Power Requirement
- AT/ ATX power mode (default with ATX power mode)
- Power input: typical +24VDC ±20%, with reverse polarity protection
- Power adapter: optional AC to DC power adapter (+24VDC, 120W)

Dimensions

- eCCF300: 90 mm(W) x 185mm (D) x 251mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

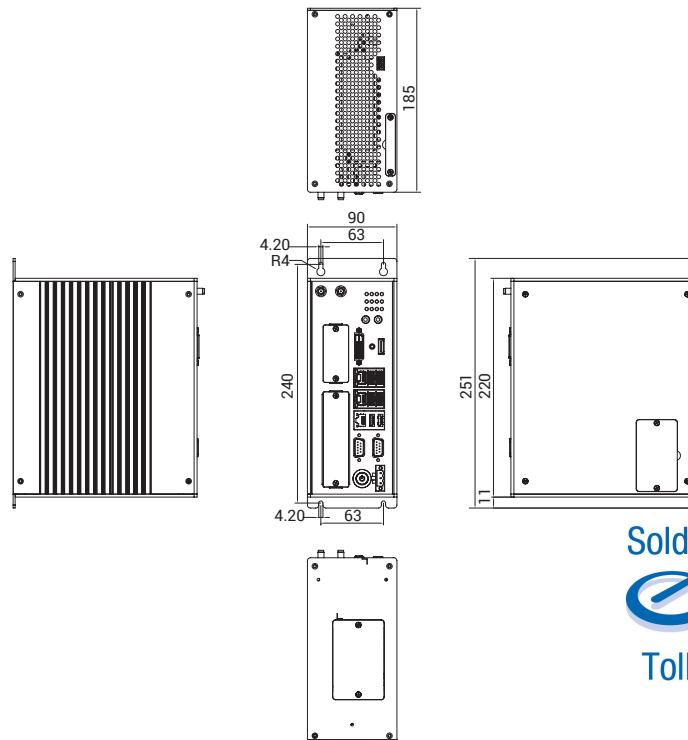
- Operating temperature: Ambient with air flow: -5°C to 55°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
 - HDD: 20G, half sine, 11ms, IEC60068-27
 - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ HDD condition:
 - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-64

Certifications

- CE approval
 - EN1000-6-2
 - EN61000-6-4
- FCC Class A
- LVD

OS Support Lists

- Windows 7 PRO, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows 10 IoT, 32bit/64bit



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Ordering Information

Model	Part Number	Description
eCCF300	+70ECCF300	6th Generation Intel® Core™ i7/i5/i3 LGA Automation System

MON - Panel Monitors

Most of EXOR heavy Industrial Touch Monitor shares identical appearance with IPC or EPC series for the same industrial environment application.



Overview

All products are available in wide and flexible range of configurations. You will have the product that fits your needs.

All products have a robust mechanical construction that will suit the most demanding of applications.

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eTOP-MON1200T - Technical Data



Panel

- LCD size: 12.1", 4:3
- Resolution: SVGA 800 x 600
- Luminance: 450cd/m2
- Contrast ratio: 700
- LCD color: 16.2M
- Viewing angle: 65 (U), 75 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB and RS232

Rear I/O

- Touch screen interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

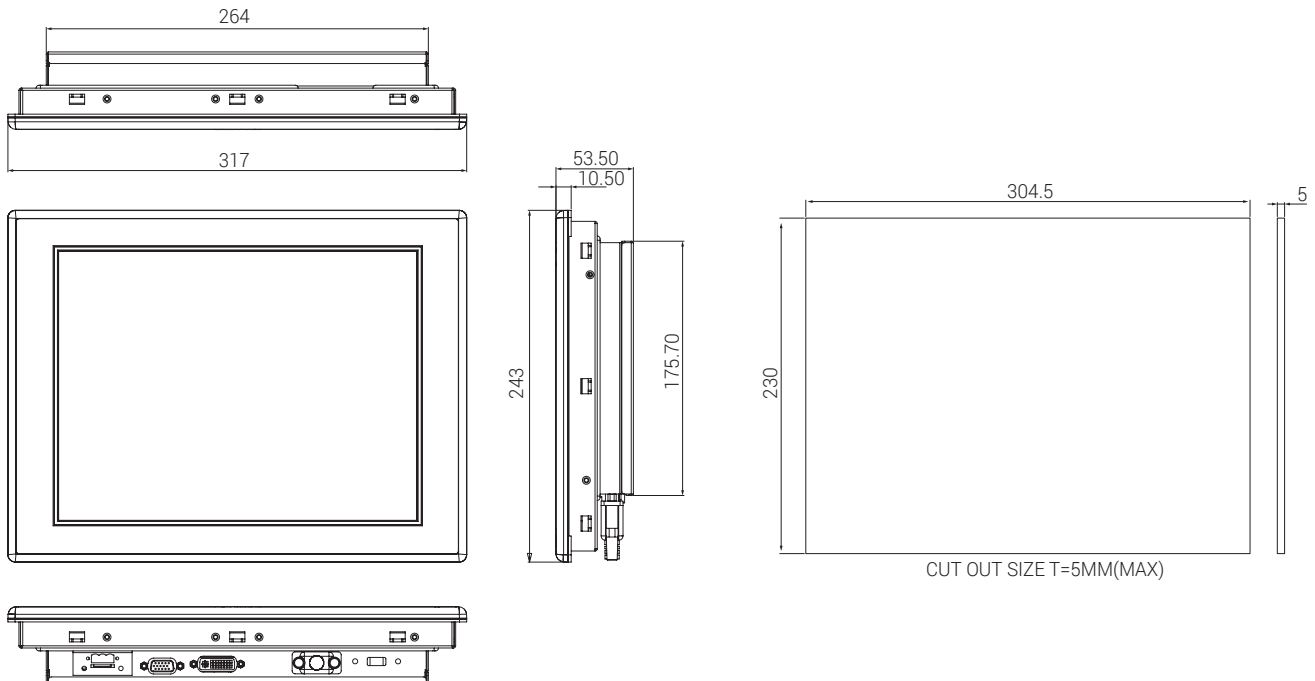
Mechanical & Environment

- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration: IEC 68 2-64 2Grms @ sine, 5~500Hz, 1hr/axis (operating) 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)

- Shock: IEC 68 2-27 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 317 x 243 x 53.5mm
- Weight: 2.9Kg

Certifications

- CE approval
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1200T	+73MON1200T	12.1" SVGA industrial 4:3 LED Backlight flush touch monitor

eTOP-MON1500T - Technical Data



Panel

- LCD size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 450cd/m2
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 70 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch screen interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

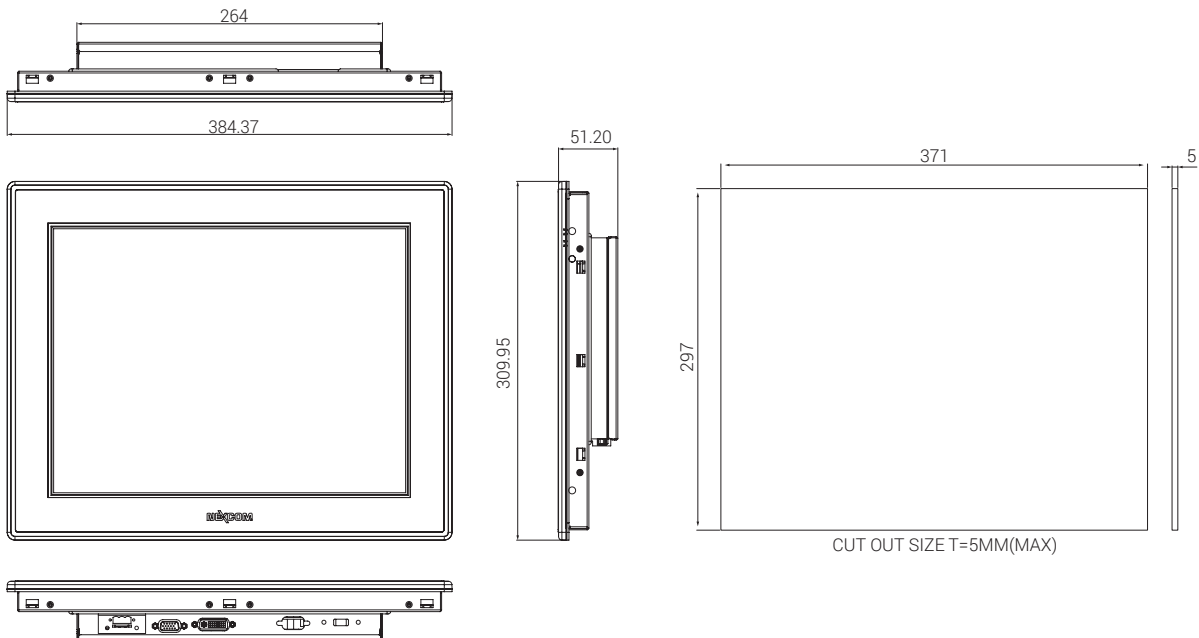
Mechanical & Environment

- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration: IEC 68 2-64 2Grms @ sine, 5~500Hz, 1hr/axis (operating) 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)

- Shock: IEC 68 2-27 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 384.37 x 309.95 x 51.2mm
- Weight: 3.98Kg

Certifications

- CE approval
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1500T	+73MON1500T	15" XGA industrial 4:3 LED Backlight flush touch monitor

eTOP-MON1700T - Technical Data



Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch interface port: RS232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

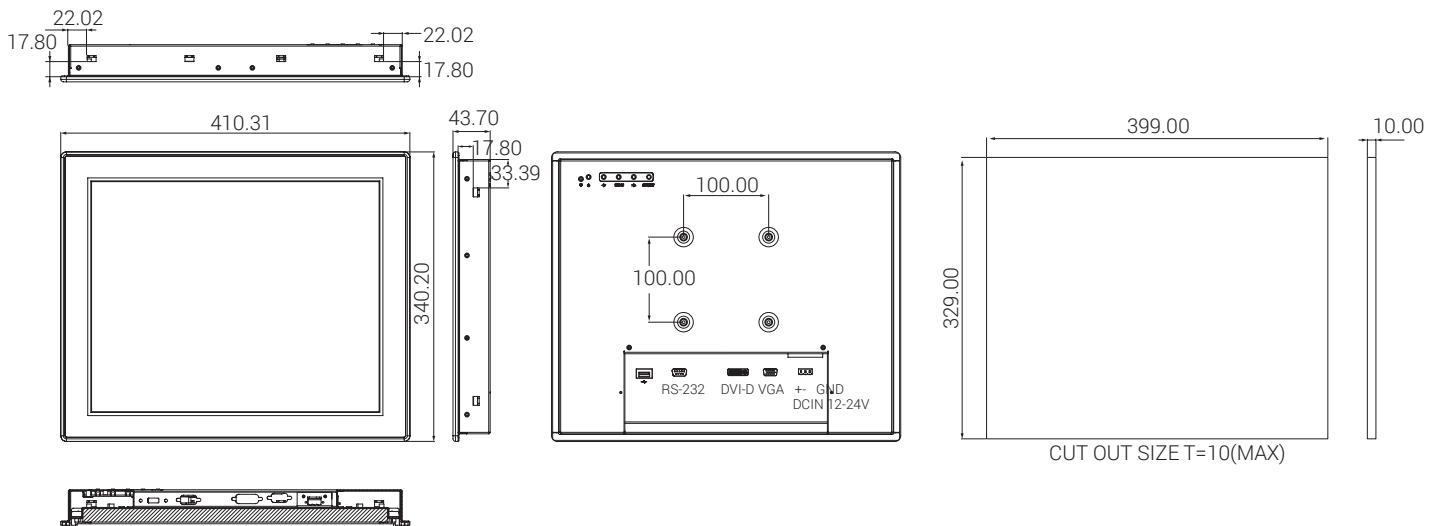
Mechanical & Environment

- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration: IEC 68 2-64 2Grms @ sine, 5~500Hz, 1hr/axis (operating) 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)

- Shock: IEC 68 2-27 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 410.4 x 340.4 x 43.7mm
- Weight: 5.3 Kg

Certifications

- CE approval
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1700T	+73MON1700T	17" SXGA industrial 4:3 LED Backlight flush touch monitor

eTOP-MON1900T - Technical Data



Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

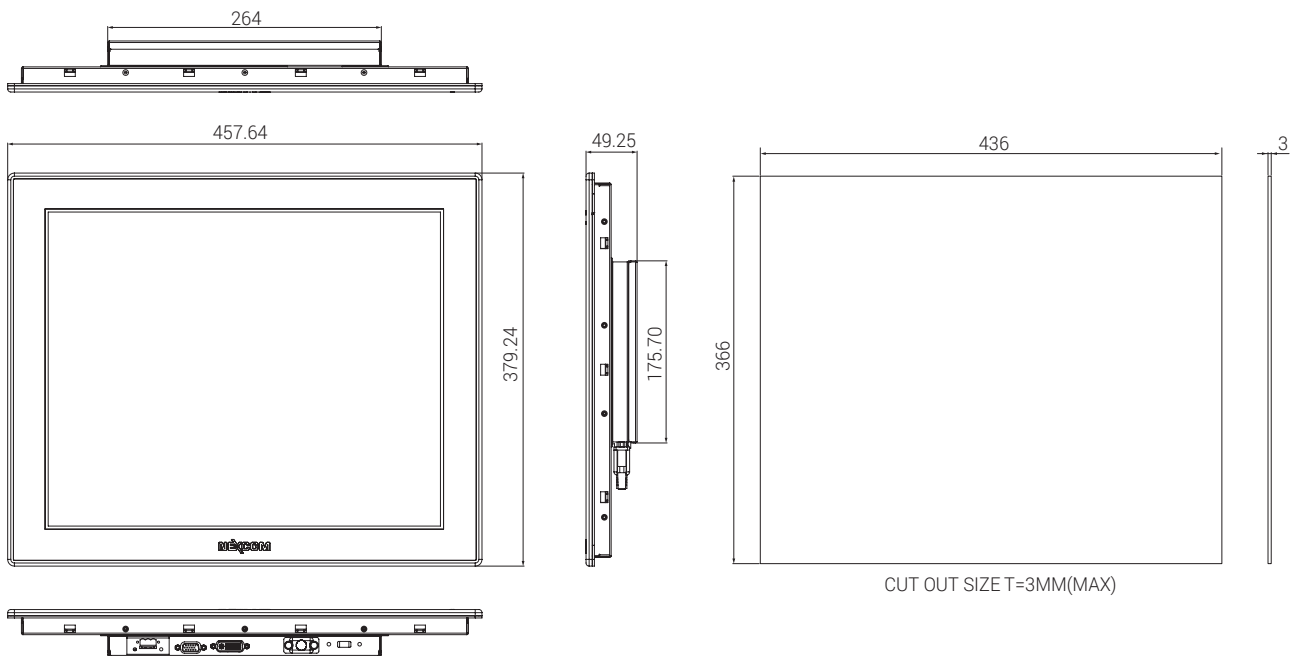
Mechanical & Environment

- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12V~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration: IEC 68 2-64 2Grms @ sine, 5~500Hz, 1hr/axis (operating) 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)

- Shock: IEC 68 2-27 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 457.64 x 379.24 x 49.25mm
- Weight: 5.4 Kg

Certifications

- CE approval
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1900T	+73MON1900T	19" SXGA industrial 4:3 LED Backlight flush touch monitor

eTOP-MON1600P - Technical Data



Panel

- LCD size: 15.6", 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 300cd/m2
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

Rear I/O

- Touch interface port: USB with Lock
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-D connector)/DisplayPort
- DC power input connector: 3-pin PHOENIX terminal Blocks



OSD Function

- OSD keypad
- Multilanguage OSD

Mechanical & Environment

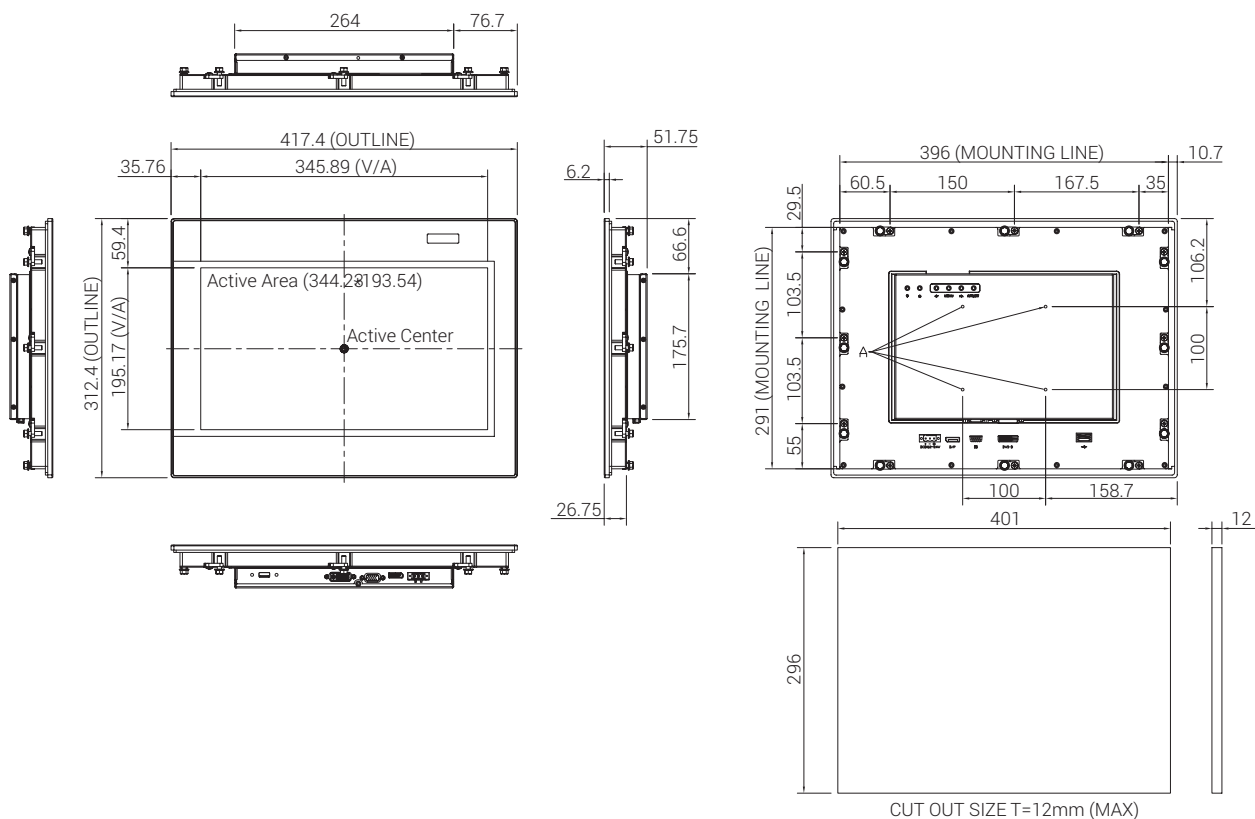
- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)



- Vibration:
 - -IEC 68 2-64
 - -2Grms @ sine, 5~500Hz, 1hr/axis (operating)
 - -2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - -IEC 68 2-27
 - -HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.4 x 312.4 x 51.75mm
- Weight: 5.48Kg

Certifications

- CE (including EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4)
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1600P	+73MON1600P	15.6" IP66 Heavy Industrial 16:9 WXGA Zero Bezel Flush Touch Monitor

eTOP-MON1800P - Technical Data



Panel

- LCD size: 18.5", 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 400cd/m2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB
- Windows 8 compliance

Rear I/O

- Touch interface port: USB with Lock
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-D connector)/DisplayPort
- DC power input connector: 3-pin PHOENIX terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

Mechanical & Environment

- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/ o panel mounting hole
- Power input: 12~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)

Vibration:

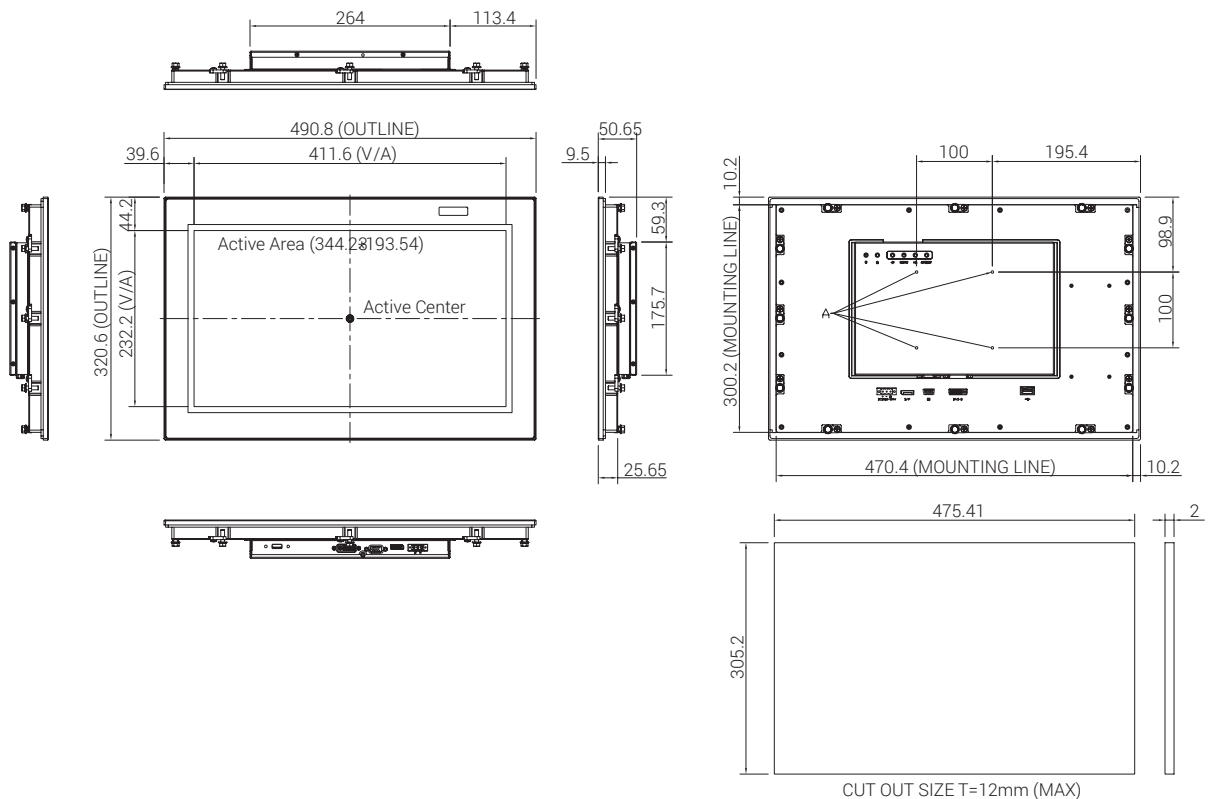
- IEC 68 2-64
- 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
- 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)

Shock:

- IEC 68 2-27
- HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 490.8 x 320.6 x 50.65mm
- Weight: 6.24Kg

Certifications

- CE (including EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4)
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON1800P	+73MON1800P	18.5" IP66 Heavy Industrial 16:9 WXGA Zero Bezel Flush Touch Monitor

eTOP-MON2100P - Technical Data



Panel

- LCD size: 21.5", 16:9
- Resolution: full HD 1920 x 1080
- Luminance: 300cd/m2
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB
- Windows 8 compliance



Rear I/O

- Touch interface port: USB with Lock
- Video port: VGA (1 x DB15)/DVI-D (1x DVI-D connector)/DisplayPort
- DC power input connector: 3-pin PHOENIX terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD



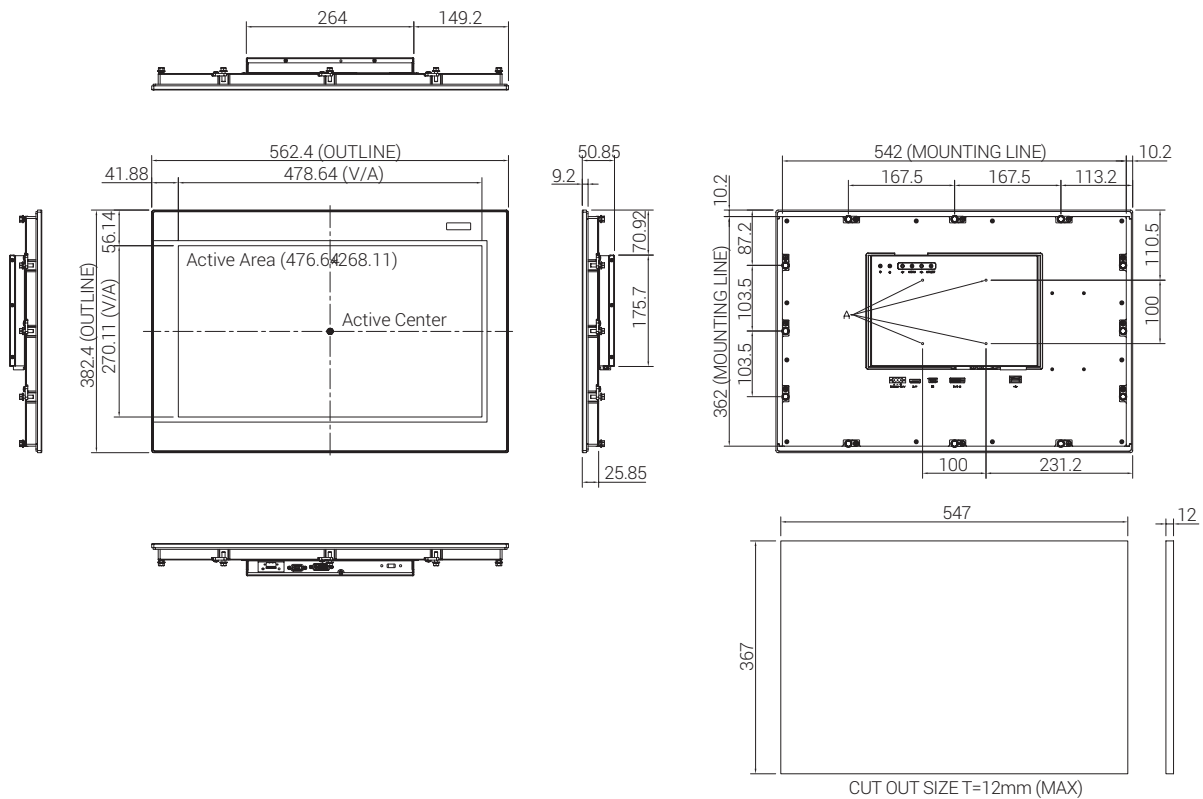
Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power input: 12~24VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)

- Vibration:
 - -IEC 68 2-64
 - -2Grms @ sine, 5~500Hz, 1hr/axis (operating)
 - -2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
 - -IEC 68 2-27
 - -HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -10°C to 60°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 562.4 x 382.4 x 50.85mm
- Weight: 7.87Kg

Certifications

- CE (including EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4)
- FCC Class B



Ordering Information

Model	Part Number	Description
eTOP-MON2100P	+73MON2100P	21.5" IP66 Heavy Industrial 16:9 WXGA Zero Bezel Flush Touch Monitor



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Product Tables

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	eXware703	eXware707	eXware707Q
System resources			
CPU	ARM Cortex-A8 1 GHz	ARM Cortex-A9 800 MHz dual core	ARM Cortex-A9 800 MHz quad core
Operating System	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	8 GB
RAM	512 MB	1 GB	2 GB
Real Time Clock, RTC Back-up, Buzzer	Yes	Yes	Yes
Interface			
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	2 (Host v. 2.0, max. 500 mA)	2 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 2 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes	Yes	Yes
Expansion	1 slot for plug-in modules	2 slots for plug-in modules	2 slots for plug-in modules
Ratings			
Power supply	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)
Current Consumption	0.35 A max. at 24 VDC	0.5 A max. at 24 VDC	0.55 A max. at 24 VDC
Input Protection	Electronic	Electronic	Electronic
Battery	Yes	Yes	Yes
Environment Conditions			
Operating Temp	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.	-20°C to +70°C	-20°C to +70°C
Storage Temp	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing	5 - 85% RH, non condensing	5 - 85% RH, non condensing
Protection Class	IP20	IP20	IP20
Dimensions and Weights			
Faceplate LxH	45x134 mm (1.77x5.27")	44 x 174 mm	44 x 174 mm
Depth D	102 mm (4.01")	144 mm	144 mm
Weight	0.6 Kg	0.7 Kg	0.7 Kg
Mounting	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)
Approvals			
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments, EN 60945, EMC Emissions and Immunity for marine applications		
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
IECEX	Zone 2: Ex nA IIC T5 Gc	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLI003	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLI003
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLI003	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLI003
DNV-GL	Yes	Yes	Yes
RCM	Yes	Yes	Yes

	eX707FB	eX715FB	eTOP507MFB
System Resources			
Display - Colors	7" TFT 16:9 LED - 16M	15,6" TFT LED - 16M	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA	1366x768, HD	800x480, WVGA
Brightness	500 Cd/m ² typ.	400 Cd/m ² typ.	400 Cd/m ² typ.
Dimming	to 0%	to 0%	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive
CPU	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 quad core 800 MHz	ARM Cortex-A8 - 1 GHz
Operating System	Linux RT	Linux RT	Microsoft Windows CE 6.0
Flash	4 GB	8 GB	256 MB
RAM	1 GB	2 GB	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes	Yes	Yes
Interface			
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port		2 (Host V2.0, max. 500 mA)	
Serial port	1 (RS-232, RS-485, RS-422, software configurable), Max 3 serial ports using plug-in modules.		1 (RS-232, RS-485, RS-422, software configurable)
SD card	Yes	Yes	
Expansion		2 slot for plug in modules	
Ratings			
Power supply	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)
Current Consumption	0.7 A at 24 VDC (max.)	1.2 A at 24 VDC (max.)	0.9 A at 24 VDC (max.)
Input Protection		Electronic	
Battery		Rechargeable Lithium battery, not user-replaceable	
Environment Conditions			
Operating Temperature	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C		-20° to +60 °C
Storage Temperature	-20°C to +70°C	-30°C to +80°C	-40 to +85 °C
Operating / Storage Humidity		5-85% RH, non condensing	
Protection Class		IP69 (front), IP20 (rear)	
Dimensions and Weights			
Faceplate LxH	217x177 mm (8.54x6.96")	450x295mm	217x177 mm (8.54x6.96")
Cutout AxB	176x136 mm (6.93x5.35")	411x256 mm (16.18x10")	176x136 mm (6.93x5.35")
Depth D+T	45+10 mm (1.77+0.4")	56+8 mm (2.20+0.33")	45+10 mm (1.77+0.4")
Weight	2.5 Kg	5.2 Kg	2.5 Kg
Approvals			
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments		
UL	cULus: UL61010-1 / UL61010-2-201		
RCM	Yes	Yes	cULus: UL508 Yes

	eX707G	eX710G	eTOP507G	eTOP507MG	eTOP510G	eTOP515G
Risorse di sistema						
Display - Colori	7" TFT 16:9 LED - 16M	10.1" TFT 16:9 LED - 16M	7" TFT 16:9 LED - 64K	7" TFT 16:9 LED - 64K	10.1" TFT 16:9 LED - 64K	15" TFT LED - 64K
Risoluzione	800x480, WVGA	1280x800, WXGA	800x480, WVGA	800x480, WVGA	1280x800, WXGA	1024x768, XGA
Luminosità	600 Cd/m ² typ.	800 Cd/m ² typ.	400 Cd/m ² typ.	400 Cd/m ² typ.	600 Cd/m ² typ.	1500 Cd/m ² typ
Dimming			fino a 0%			
Touchscreen	Capacitivo in vetro (PCAP), Multitouch					
CPU	ARM Cortex-A9 dual core 800 MHz		ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz
Sistema operativo						
Flash	Linux RT			Microsoft Windows CE 6.0		
RAM	4 GB	4 GB	128 MB	256 MB	256 MB	256 MB
Real Time Clock, RTC	1 GB	1 GB	256 MB	256 MB	256 MB	256 MB
Back-up, Buzzer						
Interfaccia						
Ethernet	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	2 (port 0 - 10/100, port 1 - 10/100) con switch integrato	2 (port 0 - 10/100, port 1 - 10/100) con switch integrato	2 (port 0 - 10/100, port 1 - 10/100) con switch integrato	2 (port 0 - 10/100, port 1 - 10/100) con switch integrato
USB	2 (Host V2.0, max. 500 mA)			2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)		
Porte seriali						
SD card						
Espansione						
Rating						
Alimentazione	24 VDC (10 fino a 32 VDC)	24 VDC (10 fino a 32 VDC)	24 VDC (10 fino a 32 VDC)	24 VDC (10 fino a 32 VDC)	24 VDC (10 fino a 32 VDC)	24 VDC (10 fino a 32 VDC)
Consumo di corrente	0.7 A at 24 VDC (max.)	1.0 A at 24 VDC (max.)	0.8 A at 24 VDC (max.)	0.9 A at 24 VDC (max.)	1.0 A at 24 VDC (max.)	1.4 A at 24 VDC (max.)
Input Protection						
Batteria						
Condizioni ambientali						
Temp. operativa	-20°C fino a +70°C	-20° fino a +60 °C (montaggio verticale). I moduli plug-in e i dispositivi USB possono limitare la temperatura massima a +50 °C	-40 fino a +85 °C	-40 fino a +85 °C	-20 fino a +70 °C	-40 fino a +85 °C
Temp. stoccaggio	5-85% RH, senza condensa	5-85% RH, senza condensa	5-85% RH, senza condensa	5-85% RH, senza condensa	5-85% RH, senza condensa	5-85% RH, senza condensa
Umidità operativa/stoccaggio	IP66 (fronte), IP20 (retro)	IP66 (fronte), IP20 (retro)	IP66 (fronte), IP20 (retro)	IP69K (fronte), IP20 (retro)		
Classe di protezione						
Dimensioni e peso						
Pannello anteriore LxH	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	187x147 mm (7.36x5.79")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	392x307 mm (15.43x12.08")
Cutout AxB	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	176x136 mm (6.93x5.35")	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	381x296 mm (15x11.65")
Profondità D+T	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.33")	47+8 mm (1.85+0.31")	47+8 mm (1.85+0.31")	52+8 mm (2.20+0.33")	56+8.5 mm (2.20+0.33")
Peso	1.5 Kg	2.5 Kg	Approx 1.0 Kg	Approx 1.0 Kg	Approx 2.7 Kg	Approx 4.0 Kg
Certificazioni						
CE	Emissione EN 61000-6-4 Immunità EN 61000-6-2 per installazione in ambienti industriali, Emissione EN 60945, Immunità EN 60945 per ambienti marini					
UL	cULus: UL61010-1 / UL61010-2-201					
UL	cULus: Class I Div. 2					
IECEX	Emissione EN 61000-6-4 Immunità EN 61000-6-2 per installazione in ambienti industriali					
ATEX	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc Zone 2/22: II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc					
DNV-GL	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc					
EU RO MR	Zone 2/22: II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc					
RCM	Si	-	-	-	-	-

	eSMART04	eSMART04M	eSMART07M	eSMART10	eSMART107
System Resources					
Display - Colors	4.3" TFT 169 - 64K	4.3" TFT 169 - 64K	7" TFT 169 - 64K	10.1" TFT 169 - 64K	7" TFT 169 - 64K
Resolution	480x272	480x272	800x480, WVGA	1024x600, WVGA	800x480, WVGA
Brightness	200 Cd/m ² typ.	200 Cd/m ² typ.	200 Cd/m ² typ.	200 Cd/m ² typ.	200 Cd/m ² typ.
Dimming	Yes	Yes	Yes	Yes	to 0%
Touchscreen	Resistive	Resistive	Resistive	Resistive	Resistive
CPU	ARM Cortex-A8 - 300 MHz	ARM Cortex A8 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux 3.12	Linux 3.12	Linux 3.12	Linux 3.12	Linux RT
Flash	2 GB	4 GB	4 GB	4 GB	4 GB
RAM	256 MB	512 MB	512 MB	512 MB	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes	Yes	Yes	Yes	Yes, Yes, No
Interface					
Ethernet port	1 (port 0 - 10/100)	1 (port 0 - 10/100)	1 (port 0 - 10/100)	1 (port 0 - 10/100)	2 (port 0 - 10/100/1000, port 1 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	2 (Host V2.0, max. 100 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	2 (RS-232), 2 (RS-422/RS-485 isolated), 2 (CAN 2.0b isolated)
SD card			No		
Expansion			No		
Ratings					
Power supply	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)
Current Consumption	0.25 A max. at 24 VDC	0.25 A max. at 24 VDC	0.3 A at 24 VDC (max.)	0.38 A at 24 VDC (max.)	0.3 A at 24 VDC (max.)
Input Protection			Automatic		
Battery			Yes (Supercapacitor)		
Environment Conditions					
Operating Temp	0 to 50 °C (vertical installation)				
Storage Temp	-20°C to +70°C				
Operating / Storage Humidity	5-85% RH, non condensing				
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)				
Dimensions and Weights					
Faceplate LxH	147x107 mm (5.78x4.21")	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	187x147 mm (7.36x5.79")
Cutout AxB	136x96 mm (5.35x3.78")	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	271x186 mm (10.66x7.32")	176x136 mm (6.93x5.35")
Depth D+T	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")	29+6 mm (1.14+0.23")	29+6 mm (1.14+0.19")
Weight	Approx 0.4 Kg	Approx 0.4 Kg	Approx 0.6 Kg	Approx 1.0 Kg	0.875 Kg
Approvals					
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2, for installation in industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments				
UL	cULus: UL508				
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	-
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc	Zone 2: II 3 G Ex ic ec IIC T6 Gc	Zone 2: II 3 G Ex ic ec IIC T6 Gc	Zone 2: II 3 G Ex ic ec IIC T6 Gc	-
DNV-GL	Yes				
EU RO MR	Yes				
RCM	Yes				

	eX705	eX707	eX710	eX715	eX721
System Resources					
Display - Colors	5" TFT 16:9 LED - 64K	7" TFT 16:9 LED - 16M	10.1" TFT 16:9 LED - 16M	15.6" TFT LED - 16M	21.5" TFT LED - 16M
Resolution	800x480, WVGA	800x480, WVGA	1280x800, WXGA	1366x768, HD	1920x1080, full HD
Brightness	300 Cd/m ² typ.	500 Cd/m ² typ.	500 Cd/m ² typ.	400 Cd/m ² typ.	300 Cd/m ² typ.
Dimming			to 0%		
Touchscreen			True Glass Projected Capacitive, Multitouch		
CPU	ARM Cortex-A8 - 1 GHz	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 quad core 800 MHz	ARM Cortex-A9 quad core 800 MHz
Operating System		Linux RT			
Flash	4 GB	4 GB	4 GB	8 GB	8 GB
RAM	512 MB	1 GB	1 GB	2 GB	2 GB
Real Time Clock, RTC Back-up, Buzzer			Yes		
Interface					
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	1 (Host V2.0, max. 500 mA)		2 (Host V2.0, max. 500 mA)		
Serial port	1 (RS-232, RS-485, RS-422, softw.conf), Max 2 serial ports using plug-in modules.		1 (RS-232, RS-485, RS-422, software configurable), Max 3 serial ports using plug-in modules.		
SD card			Yes		
Expansion	1 slot for plug-in modules	2 slot for plug-in modules	2 slot for plug-in modules	2 slot for plug-in modules	2 slot for plug-in modules
Ratings					
Power supply	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)
Current Consumption	0.6 A at 24 VDC (max.)	0.7 A at 24 VDC (max.)	1.0 A at 24 VDC (max.)	1.2 A at 24 VDC (max.)	1.7 A at 24 VDC (max.)
Input Protection			Electronic		
Battery			Rechargeable Lithium battery, not user-replaceable		
Environment Conditions					
Operating Temperature		-20° to +60 °C (vertical installation). Plug-in modules and USB devices may limit max temperature to +50 °C.			
Storage Temp		-20°C to +70°C			
Operating / Storage Humidity		5-85% RH, non condensing			
Protection Class		IP66 (front), IP20 (rear)			
Dimensions and Weights					
Faceplate LxH	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	422x267 mm (16.6x10.5")	552x347 mm (21.7x13.66")
Cutout AxB	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	411x256 mm (16.18x10")	541x396 mm
Depth D+T	52+8 mm (2.40+0.31")	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.33")	56+8 mm (2.20+0.33")	56+8.5 mm
Weight	1.3 Kg	1.5 Kg	2.5 Kg	4.1 Kg	6.1 Kg
Approvals					
CE		Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments			
UL		cULus: UL61010-1 / UL61010-2-201			
UL		cULus: Class 1 Div 2			
IECEX		Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc			
ATEX		Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc			
DNV-GL		Yes			
LR		Yes			
EU RoM/R		Yes			
RCM		Yes			

	eTOP 504	eTOP 506	eTOP 507	eTOP 507M	eTOP 510	eTOP 512	eTOP 513	eTOP 515
System Resources								
Display - Colors	4.3" TFT 16.9 LED - 64K	5.7" TFT LED - 64K	7" TFT 16.9 LED - 64K	7" TFT 16.9 LED - 64K	10"4 TFT LED - 64K	12"1 TFT LED - 64K	13"3 TFT 16.9 LED - 64K	15" TFT LED - 64K
Resolution	480x272, WQVGA	320x240, QVGA	800x480, WVGA	800x480, WVGA	800x600, SVGA	800x600, SVGA	1280x800, WXGA	1024x768, XGA
Brightness	150 Cd/m ² typ.	200 Cd/m ² typ.	300 Cd/m ² typ.	300 Cd/m ² typ.	300 Cd/m ² typ.	300 Cd/m ² typ.	300 Cd/m ² typ.	300 Cd/m ² typ.
Dimming	to 0%							
Touchscreen	Resistive							
CPU	ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0							
Flash	128 MB	128 MB	128 MB	256 MB	256 MB	256 MB	256 MB	256 MB
RAM	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR
Real Time Clock, RTC Back-up,Buzzer	Yes							
Interface								
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch							
USB port	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)							
Serial port	1 (RS-232, RS-485, RS-422, software configurable)							
SD card	Yes							
Expansion	2 slot for plug in modules							
Ratings								
Power supply	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)	24 VDC (10 to 32 VDC)
Current Consumption	0.55 A at 24 VDC (max.)	0.65 A at 24 VDC (max.)	0.7 A at 24 VDC (max.)	0.7 A at 24 VDC (max.)	1 A at 24 VDC (max.)	1.05 A at 24 VDC (max.)	1.15 A at 24 VDC (max.)	1.25 A at 24 VDC (max.)
Input Protection	Automatic							
Battery	Rechargeable Lithium battery, not user-replaceable							
Environment Conditions								
Operating Temp	0 to +50 °C							
Storage Temp	-20 to +70 °C							
Operating/Storage Humidity	5-85% RH, non condensing							
Protection Class	IP66 (front), IP20 (rear)							
Dimensions and Weights								
Faceplate LxH	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	187x147 mm (7.36x5.79")	187x147 mm (7.36x5.79")	287x232 mm (11.3x9.13")	336x267 mm (13.22x10.51")	336x267 mm (13.22x10.51")	392x307 mm (15.43x12.08")
Cutout AxB	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	176x136 mm (6.93x5.35")	176x136 mm (6.93x5.35")	276x221 mm (10.86x8.70")	326x256 mm (12.83x10.07")	326x256 mm (12.83x10.07")	381x296 mm (15x11.65")
Depth D+T	56+4mm (2.40+0.16")	47+4mm (1.85+0.16")	47+4mm (1.85+0.16")	47+4mm (1.85+0.16")	56+4mm (2.20+0.16")	56+4mm (2.20+0.16")	56+4mm (2.20+0.16")	60+4mm (2.36+0.16")
Weight	Approx 1.0 Kg	Approx 1.0 Kg	Approx 1.0 Kg	Approx 1.0 Kg	Approx 2.1 Kg	Approx. 2.8 Kg	Approx. 2.8 Kg	Approx 3.5 Kg
Approvals								
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments							
UL	cULus: UL508							
UL	cULus: Class I Div. 2							
DNV-GL	Yes							
RCM	Yes							

	JSmart705	JSmart707	JSmart710	JSmart715	JSmart721
System Resources					
Display - Colors	5" TFT – 16M	7" TFT – 16M	10.1" TFT – 16M	15.6" TFT – 16M	21.5" TFT – 16M
Resolution	800x480	1024x600	1280x800	1366x768	1920x1080
Brightness	300 cd/m ² typ.	400 cd/m ² typ.	400 cd/m ² typ.	400 cd/m ² typ.	400 cd/m ² typ.
Dimming	to 0%	to 0%	to 0%	to 0%	to 0%
Touchscreen	Projected capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 quad core - 800 MHz	ARM Cortex-A9 quad core - 800 MHz
Operating System	Linux RT	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	4 GB	8 GB	8 GB
RAM	1 GB	1 GB	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB	64 KB
Real Time Clock, RTC Back-up	Yes	Yes	Yes	Yes	Yes
Interface					
Ethernet port	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE
USB port			1 (Host V2.0, max. 500 mA, available with special cable)		
LED			1 RGB		
Sensors			Temperature, 3-Axis Accelerometer		
Wi-Fi*	No	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
Buzzer			Yes		
Ratings					
Power supply	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3at PoE+	IEEE 802.3bt 4PPoE
Power Consumption	6 W	9 W	12 W	19 W	32 W
Battery			Yes (rechargeable)		
Environment Conditions					
Operating Temp			-20° to +55° C (vertical installation)		
Storage Temp			-30°C to +80°C		
Operating / Storage Humidity			5-85% RH, non-condensing		
Protection Class			IP67 (requires appropriate accessories and cables)		
Dimensions and Weights					
Faceplate LxH	148.3x105.1 mm (5.83x 4.13")	195.2x131.6 mm (7.68x5.18")	264.5x183.1 mm (10.41x7.20")	398.6x248 mm (15.69x 9.76")	534.1x325.6 mm (21.02x 12.81")
Depth D+T+T	16.5 mm (0.06")	16.5 mm (0.06")	16.5 mm (0.06")	26.5 mm (1.04")	26.5 mm (1.04")
Weight	0.5 Kg	0.7 Kg	1.2 Kg	4.0 Kg	6.0 Kg
Approvals					
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment				
UL	cULus: UL61010-1 / UL61010-2-201				

*Awaiting certifications in 2019

	EPC0840	EPC1240T	EPC1540T	EPC1740T	EPC1940T
LCD Size	8.0" 4:3	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max. Resolution	SVGA, 800 x 600	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m2)	400	500	400	350	350
Contrast Ratio	500	700	2500	800	1000
Viewing Angle (H-V)	50(U), 70(D), 70(L), 70(R)	65(U), 75(D), 80(L), 80(R)	88(U), 88(D), 88(L), 88(R)	60(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)
Backlight			LED		
LCD Color	262K	16.7M	16.7M	16.7M	16.7M
Touch Screen			Resistive 5-wire		
Touch Light Transmission	82%	80%	81%	81%	81%
CPU	Intel Atom® E3826 dual core 1.46GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz
OS			Win7, Win10		
Memory	2GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module
CF Socket	1	1	1	1	1
2nd Display Output			VGA		
Ethernet (10/100/1000)			2		
Line-out			Line out		
USB 2.0/3.0	3/1	2/1	2/1	2/1	2/1
COM Port	2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485
Power Switch	1/1	1/1	1	1	1
Remote Power Switch			2-pin		
Reset Button	1	1	1	1	1
Power Jack			Terminal blocks 3-pin phoenix connector		
Expansion	1 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Construction Front Panel			ABS+PC plastic front bezel		
Mounting			Panel/wall/stand/VESA 100 x 100 mm		
Power Input			+12 to 30V DC		
Power Supply Adapter			Optional		
Operating Temp.	-5°C to 50°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C
Storage Temp.			-20°C to 75°C		
Operating Humidity			10%~90%, non-condensing		
IP Level			Front frame IP65		
Cut Out Size (W x H, mm)	209.6 x 176.1	304.5 x 230	371 x 297	399 x 329	436 x 366
Dimension (W x H x D, mm)	217.4 x 176.4 x 68.9	317 x 243 x 65.5	384.37 x 309.95 x 63	410.4 x 340.4 x 65.9	457.64 x 379.24 x 61.25
Net Weight (kg)	2.3	3.6	4.7	5.6	6.3
Certification			CE, EN61000-6-2/4, FCC Class A		

	IPC1040P	IPC1640P	IPC1840P	IPC2140P	IPC1570T	IPC1770T	IPC1970T	IPC1670P	IPC2170P
LCD Size	10.1" 16:9	15.6" 16:9	18.5" 16:9	21.5" 16:9	15" 4:3	17" 4:3	19" 4:3	15.6" 16:9	21.5" 16:9
Max. Resolution	WXGA 1280 x 800	HD, 1366x768	WXGA 1366 x 768	Full HD, 1920 x 1080	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	HD, 1366x768	Full HD, 1920 x 1080
Luminance (cd/m ²)	300	400	300	300	450	350	350	400	300
Contrast Ratio	1300	500	1000	5000	800	1000	1000	500	5000
Viewing Angle (H+V)	85(U), 85(D), 85(L), 85(F)	80(U), 80(D), 85(L), 85(F)	80(U), 80(D), 85(L), 85(F)	89(U), 89(D), 89(L), 89(F)	70(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(F)	80(U), 80(D), 85(L), 85(F)	80(U), 80(D), 85(L), 85(F)	89(U), 89(D), 89(L), 89(F)
Backlight	LED	LED	LED	LED	LED	LED	LED	LED	LED
LCD Color	262K	16.7M	16.7M	16.7M	16.2M	16.7M	16.7M	16.7M	16.7M
Touch Screen	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	10 x point P-Cap	10 x point P-Cap
Touch Light Transmission	87%	87%	87%	87%	81%	81%	80%	87%	87%
CPU	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	4th gen. Intel® Core™ i5/i3, LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket
Chipset	-	-	-	-	Intel® Q87	Intel® Q87	Intel® Q87	Intel® Q87	Intel® Q87
OS	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10
Memory	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L
CFast Socket	1	1	1	1	1	1	1	1	1
2nd Display Output	-	VGA	-	-	DV/HDP	-	-	-	-
PS2 KB/MS	-	-	-	-	1	1	1	1	1
Ethernet (10/100/1000)	2	2	2	2	2	2	2	2	2
Line-out	-	Line-out	-	-	-	-	-	-	-
Line-in	-	-	-	-	Line-in	Line-in	Line-in	Line-in	Line-in
Mic-in	-	-	-	-	MIC-in	MIC-in	MIC-in	MIC-in	MIC-in
USB 2.0/3.0	2/1	2/1	2/1	2/1	1 (1 in front)/4	1 (1 in front)/4	1 (1 in front)/4	-/4	-/4
COM Port	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1	1	1	1	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin	2-pin	3-pin	3-pin	3-pin	3-pin	3-pin
Reset Button	1	1	1	1	1	1	1	1	1
Power Jack	-	-	-	-	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots
Constr. Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	Optional	Optional	Optional	Optional	Optional
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Operating Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-10°C to 50°C	-10°C to 50°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
IP Level	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out (W x H, mm)	294 x 209	398 x 293	475.4 x 305.2	544 x 364	382 x 312	434.4 x 358.9	452 x 382	398 x 293	544 x 364
Dimension (W x H x D)	308 x 223 x 60.7	417.4 x 312.4 x 63.75	490.8 x 320.6 x 62.6	562.4 x 382.4 x 62.85	400 x 330 x 104.9	451 x 375.5 x 105	470 x 400 x 104.9	417.4 x 312.4 x 105.95	562.4 x 382.4 x 105.05
Net Weight (kg)	3.7	6.4	8.2	9.26	8.3	9.5	10.3	9.18	11.7
Certifications	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A	CE, EN61000-6-2/4, FCC Class A

	eCC105	eCC106	eCC3600E	eCC3800E
CPU	Intel Atom® E3826 1.46GHz	Intel® Pentium® N3710 1.6GHz	3th Gen. Intel® Core™ Intel® Core i7/i5/i3 rPGA socket	6th Gen. Intel® Core™ i7/i5/i3 LGA socket
Chipset	Intel® Bay Trail-H	Intel® Braswell	Intel® Q77 PCH	Intel® Q170 PCH
Max. Memory	8GB DDR3L	8GB DDR3L	8GB DDR3/DDR3L	16GB DDR4
HDD Space	1 x 2.5" SATA 2.0 HDD bay CFast	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
CFast Socket	1 (external, SATA 2.0 CFast)	1 (external, CFast)	1 (External, CFast)	1 (external, M.2)
eMMC	-	-	-	-
VGA	-	-	1	-
LVDS	-	-	-	-
DVI	1 (DVI-H)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	-	1
DisplayPort	-	1	2	1
USB	2 x USB 2.0, 1 x USB 3.0	4 x USB 3.0	2 x USB 2.0/4 x USB 3.0	4 x USB 3.0, 2 x USB 2.0
Serial Port	4	4	6	2
RS422/485	2	2	1	2
RS422/485 Isolation	-	-	-	2
mini-PCIe	1	1	1	2
M.2	-	-	-	1
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	3x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC	ATX, DC + 9 ~ 30V	ATX, DC + 9 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	-	-	1 x PCIe x4	1 x PCIe x4
Win7 32-bit	V	V	V	V
Win7 64-bit	V	V	V	V
Win10 32-bit	V	V	V	-
Win10 64-bit	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-20°C to 70°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C
System Dimension (W x D x H, mm)	185 x 131 x 54	185 x 131 x 54	215 x 272 x 93	215 x 272 x 93
Carton Dimension (W x D x H, mm)	259 x 233 x 129	245 x 318 x 152	378 x 342 x 269	378 x 342 x 269
Net Weight (kg)	1.3	1.3	4.5	4.5
Gross Weight (kg)	2	2	5.9	5.9

	eCCF105	eCCF200	eCCF300
CPU	Intel Atom® x5-E3930 1.8GHz	Intel® Celeron® J1900 2.0GHz	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)
Chipset	Intel® Apollo Lake-I	Intel® Bay Trail-D	Intel® Q170
Max. Memory	Onboard 4GB DDR3L	8GB DDR3L	8GB DDR4
TPM	-	-	-
NVRAM	-	-	-
Storage	Onboard eMMC 16GB	1 x 2.5" SATA HDD bay	2 x 2.5" SATA HDD bay
CFast Socket	-	-	1 (external, CFast)
SD Card	1	1	-
DVI	-	1 (DVI-H)	1 (DVI-D)
HDMI	1	-	1
DisplayPort	-	1	-
USB	4 x USB 3.0	3 x USB 2.0, 1 x USB 3.0	2 x USB2.0, 4 x USB3.0
Serial Port	2	2	2
RS422/485	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
RS422/485 Isolation	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
mini-PCIe	2 x Full size	2	2
SIM Card Holder	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Port	2 x GbE (Intel® I210-IT)	2 x GbE	3 x GbE
Audio	-	Line-out (internal)	Mic-in & Line-out
Fieldbus I/O Support	-	1 (optional)	1 (optional)
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Win7 32-bit	-	V	V
Win7 64-bit	-	V	V
Win10 32-bit	-	V	V
Win10 64-bit	V	V	V
Power Supply Adapter	Optional	Optional	Optional
Expansion	-	-	-
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C
System Dimension (W x D x H, mm)	46.2 x 100 x 120	85 x 157 x 214	90 x 185 x 251
Carton Dimension (W x D x H, mm)	223 x 191 x 206	346 x 265 x 200	389 x 329 x 251
Net Weight (kg)	0.7	2.3	3.5
Gross Weight (kg)	1.6	3.3	4.9

Model	MON1200T	MON1500T	MON1700T	MON1900T	MON1600P	MON1800P	MON2100P
LCD Size	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3	15.6" 16:9	18.5" 16:9	21.5" 16:9
Max. Resolution	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	WXGA, 1366 x 768	WXGA, 1366 x 768	Full HD, 1920 x 1080
Luminance (cd/m ²)	450	400	350	350	300	400	300
Contrast Ratio	700	2500	800	1000	500	1000	5000
Viewing Angle (H-V)	65 (U), 75 (D), 80 (L), 80 (R)	88 (U), 88 (D), 88 (L), 88 (R)	60 (U), 80 (D), 80 (L), 80 (R)	80 (U), 80 (D), 85 (L), 85 (R)	80 (U), 80 (D), 85 (L), 85 (R)	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Backlight	LED	LED	LED	LED	LED	LED	LED
LCD Color	16.2M	16.7M	16.7M	16.7M	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	10 Point P-Cap	10 Point P-Cap	10 Point P-Cap
Touch Light Transmission	80%	81%	81%	81%	87%	87%	87%
Touch Screen I/F	RS 232, USB	RS 232, USB	RS 232, USB	RS 232, USB	USB	USB	USB
OSD Function	OSD keypad	OSD keypad	OSD keypad	OSD keypad	OSD Keypad	OSD Keypad	OSD Keypad
Video Input	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D; DP	VGA; DVI-D; DP	VGA; DVI-D; DP
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	"Terminal Blocks 3-Pin Phoenix Connector"	"Terminal Blocks 3-Pin Phoenix Connector"	"Terminal Blocks 3-Pin Phoenix Connector"
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	Aluminum Front Zero Bezel	Aluminum Front Zero Bezel	Aluminum Front Zero Bezel
Mounting				Panel/wall/stand/VESA 100 x 100 mm			
Power Input	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC	+12~30VDC	+12~30VDC	+12~30VDC
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, Non-condensing	10%~90%, Non-condensing	10%~90%, Non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65	Front Frame IP66	Front Frame IP66	Front Frame IP66
Cut Out Size (W x H, mm)	304.5 x 230	371 x 297	399 x 329	436 x 366	401 x 296	475.4 x 305.2	547 x 367
Dimension (W x H x D, mm)	317 x 243 x 53.5	384.37 x 309.95 x 51	410.4 x 340.4 x 53.9	457.64 x 379.24 x 49.15	417.4 x 312.4 x 51.75	490.8 x 320.6 x 50.65	562.4 x 382.4 x 50.85
Net Weight (kg)	2.9	3.9	4.8	5.5	5.48	6.24	7.87
Certifications	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B