EXOR

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Your Automation Partner

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EXOR

X Platform Components

The Business Landscape is Changing Rapidly

Our New Logo Reflects these Same Changes at EXOR International

EXOR Corporate

EXOR International, an Italian company, operating globally, has been designing, developing and manufacturing solutions in **HMI, control, and industrial IoT for nearly half a century**.

With over 20 global brand label customers ranging from industrial, building automation, marine, and more, **EXOR is the name that in many industries the most influential companies trust their reputation to**. The EXOR offer ranges from the standard product, customized hardware & software, to fully embedded solutions to meet your goals.

EXOR provides you with **easy-to-use tools which express a highly advanced technology** fully responsive to the concepts of Industry 4.0. Founded in 1971, today it has 150 employees across Italy, Germany, USA and India and supported by more than 80 local distributors worldwide.

Each EXOR branch is run and staffed with local skilled professionals to offer guidance, consultation and technical support in your time zone. The central design of projects and their manufacture takes place in the headquarters in Italy with strict control over the quality of service as well as product.

EXOR offers solutions for **every budget class** of application and almost every installation environment including harsh environments.

The X Platform provides a secure whole IoT product solution including hardware, software, and cloud technologies to enable optimal service connectivity and Software as a Service (SAAS) as well as maximizing user value creation & revenue.

EXOR Research and Development

EXOR controls all the macro areas of product design and development. **EXOR is the only company in the global sector that engineers from the edge to the cloud, from the level of System on Module to the Industrial cloud.** The research and development department of EXOR brings nearly 50 years of practical experience to resolve your challenges by covering the following areas:

- EXOR develops Systems on Module done to the micro and nano level with PCB design and FPGA used in product industrialization.
- EXOR develops HMI Software. Including BSP, firmware, soft PLC and multiple protocol communications.
- EXOR completes the mechanical design of plastic and die casting moulding with extensive certification expertise.
- EXOR has an Industrial Cloud constructed with state-of-the-art technology specifically mapped for scalability, reliability and fault tolerance.

Covering all these areas is what EXOR terms the X Platform.

This wealth of knowledge and the extensive pre zero series testing allow EXOR to confidently offer a **no argument five-year guarantee on the majority of standard products**, even as EXOR dramatically reduces the time to market for any client on the development of a new product or ecosystem.

EXOR Production

With an output capacity of 100,000 SOM pieces and 60,000 final visualization products per year, EXOR maintains a stable internal competence in production. EXOR is Quality Management System certified with **ISO9001:2015, IECEx (QAR) certified with IEC 80079-34:2013** and what we are incredibly proud of, **Environmental certified with ISO14001:2015.**

This apparent high level of production skills offers several essential advantages to you:

- High levels of flexibility in production to **help you manage your inventory position** as efficiently as possible
- Flexibility to peaks in demand, so that **you can satisfy your final user** in the most efficient manner possible
- Tremendously efficient Technical Support both pre and post sales as the circle of competence (R&D + Production + Repair + Technical support), each giving input and feedback to the other departments means that **EXOR will resolve your issue quickly**.

EXOR uses industry 4.0 concepts in its management of suppliers, any external tier construction and all internal production processes. Acquiring and sharing all data through its industrial cloud, Corvina Cloud, **the process data on each product produced is in total and absolute control.**

Being in control **allows an exceptional level of flexibility for EXOR** to remodel and reconfigure its operating network in an extremely rapid manner, with the aim of satisfying your requirements.

EXOR Support

The circle of competence within **EXOR of R&D + Production + Repair + Technical support**, is so complete that EXOR can offer globally an extensive Technical Support with the following features:

• Free of charge for both phone and email support
• Support for developing JMobile applications
• Support for discontinued versions

Our basic Service Level Agreement is the first reply by email within one hour of the problem receipt, with technical support closed only during local, national holidays.

EXOR uses Corvina Cloud 1.0 extensively for technical assistance. This technical knowledge and experience transferred via Corvina Cloud 1.0 is appreciated by our clients as the most recent survey demonstrates:

• 90% of customers report EXOR technical support quality is higher or much higher than other
  technical support services
• 95% of customers would likely or very likely recommend EXOR for his technical support
• 97% of customers are satisfied or very satisfied with time for resolution

Now no one ever says that their technical support teams are not capable and so it is only after purchasing that you will honestly see the level of service offered. **The above annual survey gives credibility to EXOR claims.**

In the real world, there will always be problems; the key is, how vital is resolving your issues to EXOR.
The above annual survey gives credibility to EXOR claims.

Software Solutions

Visualization and Connectivity Software

JMobile is a principle driving force in the X Platform.

Exor began developing the **JMobile software** in 2006 in close cooperation with a group of major clients. This trusting collaboration with the market has continued throughout the subsequent years and as a consequence has led to a unique software package, responding in a secure and stable manner to real needs.

- 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
- Browser widget

- More than 200 communication protocols readily available for all platforms with gateway function
- 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, HTML5

Overview

The **three principles that have guided and will continue to guide** this development are:
- **Remain open** to the major fieldbus / protocols of communication
- **Use open and universally recognized** market technological standards such as HTML5, SVG, XML
- Integrations of market-leading **3rd party software will be made with high UI and extremely secure**.

These three principles working together leads EXOR and our customers to the best of all situations where the secure, solid JMobile backbone of highly critical software is able to contain and implement in use the software that is needed.

JMobile with a fully integrated CODESYS PLC has grown to permit communication to all I/O, Sensors, Motion devices via the major protocols of PROFINET, EtherCAT, POWERLINK, EtherNet/IP, Modbus amongst others. **Transmitted using OPC UA standard** and soon pub/sub **over TSN**, JMobile covers the Connectivity, Device management, Process management and Data Visualization components of any platform.
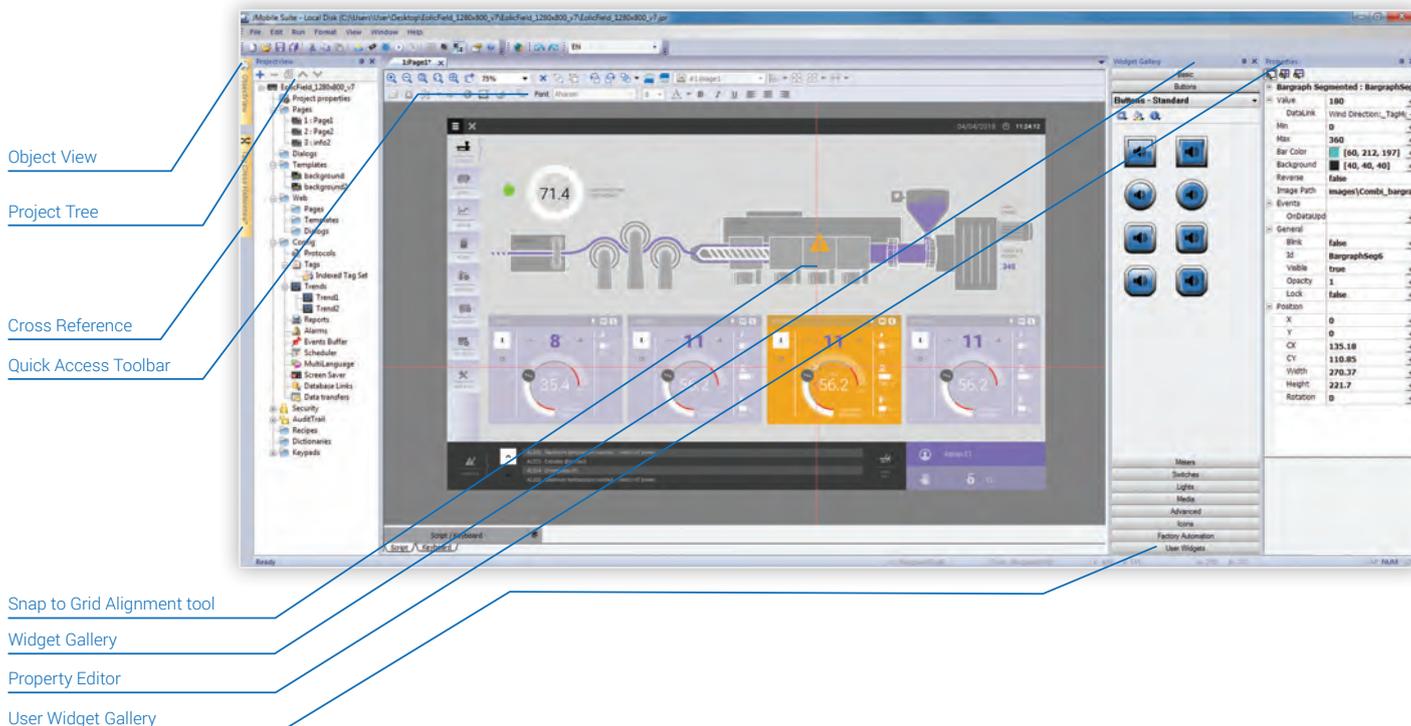
Recent Updates Have Included

JMobile also covers inside of a smart SCADA or as a simple IoT gateway, sending all data to higher Enterprise levels and external interfaces via the highly robust and secure **OPC UA** (the software is ready to use the OPC UA pub/sub once the specifications are ready) or where deemed suitable a MQTT broker. JMobile client-server architecture is conversant **with current HTML5 web technologies** and uses a QT engine and Scalable Vector Graphics. This provides users with advanced control and remote supervision from any browser, any device (smartphone, tablet, or computer).

This seamless communication which is already envied as a real technical achievement does not convey the completeness of JMobile. What began as a close contact with customers has remained so deeply ingrained into the development process that the **beautiful user experience is a defining attribute**.

Through a rich set of symbols, widgets and advanced functions (e-mail, RSS, PDF Reporting, Scheduler, HTML5 Browser, Gesturing), incredible graphic images, **Canvas**, the main design element in HTML5 in association with Javascript, **table design and layout for even the most extreme of data visualization** needs, BACnet, CANopen and Network stacks available for integrated PLC via CODESYS v3, PING for easier network diagnostics, DNP3 Outstation for all smart grid applications, all the way down to Indexed Tags and a full FTP client. **It is all intuitively easy to use.**

Object View

Project Tree

Cross Reference

Quick Access Toolbar

Snap to Grid Alignment tool

Widget Gallery

Property Editor

User Widget Gallery

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
- Ready for responsive design
- 100% HTML5 web HMI Interface
- Realtime Data Update (up to 10x per second)
- Multi touch Support
- Ready for iOS and Android
- Ready for most common Browsers for PC and Smart Devices
- 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
- Multi language
- Javascript

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 Solutions

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 are 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 access to the devices
- Maintenance and Installation cost reduction
- Increases Industry 4.0 implementation by completing the **IIoT Whole Product Solution of the X Platform**
- New business services opportunity (predictive maintenance, etc.)
- 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 companies on a same Corvina installation.
- Break up a large enterprise into smaller departments, that shall remain separate and host all of them on a single Corvina installation.


Features

- Industrial advanced VPN for IoT Security encrypted using SSL/TLS protocol
- Web access using standard browser
- Live Map Dashboard
- Remote and secure maintenance and installation
- Subnet Mapping to access to all devices connected to the internal LAN

- USB Provisioning in order to reduce installation time
- Public Cloud or On-premise installation
- Customization of the application links
- Layered Security
- Firewall settings are configurable
- User and access management

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 IoT security.

Granular role-based access permissions allow **users to only gain acces to required resources and nothing else.**
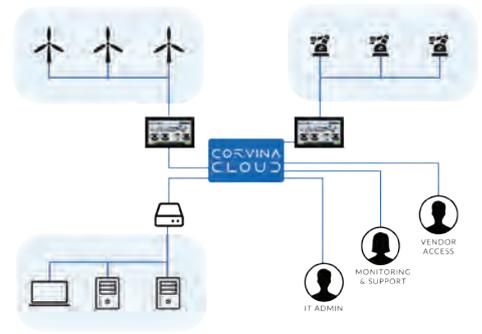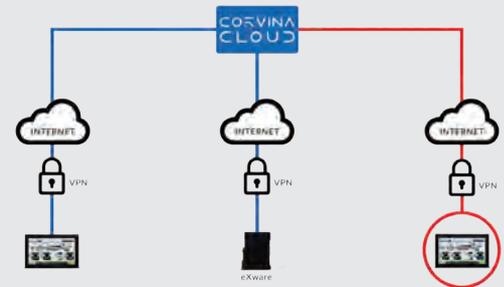
Isolating for Maintenance and Installation

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.
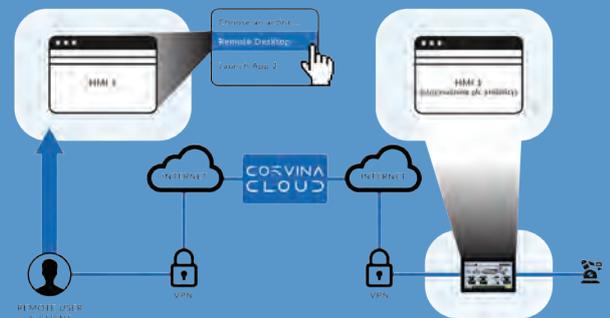
Subnet Mapping

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.
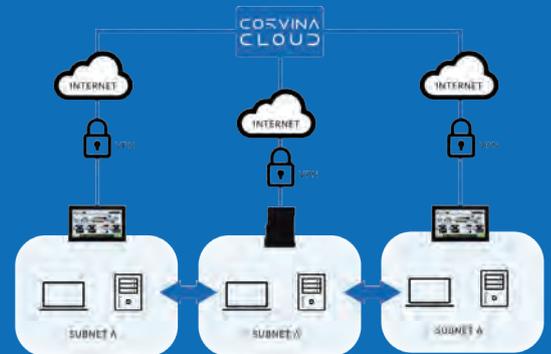
USB Provisioning

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.
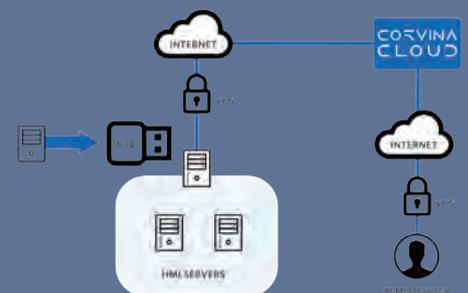
Web access using standard browser

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.**
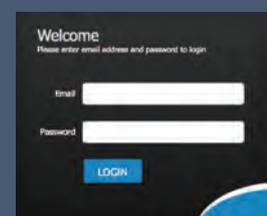
Hardware Solutions

eX700
Series

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 with all the major network, Integrated VPN with Service Cloud, **all with a 5 year warranty as standard**.

- 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 possibile 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

eX705 - Technical Data

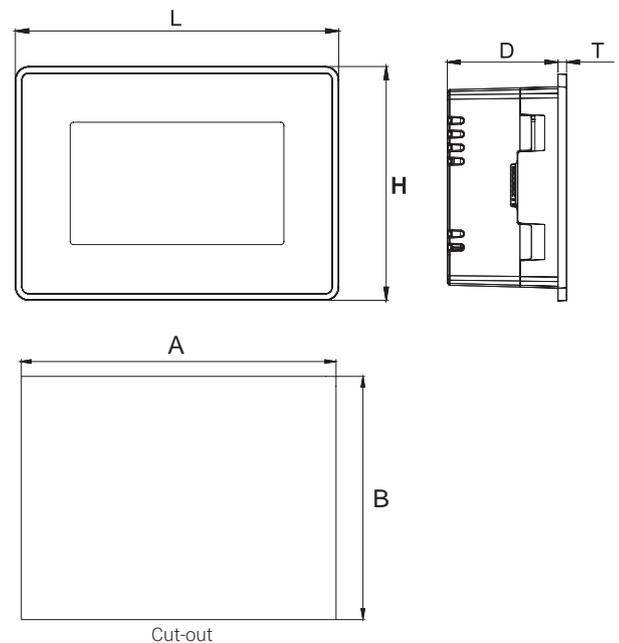| System Resources	
Display - Colors	5" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux RT
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
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

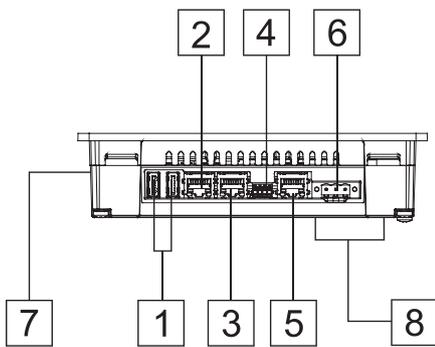Cut-out

Ordering Information

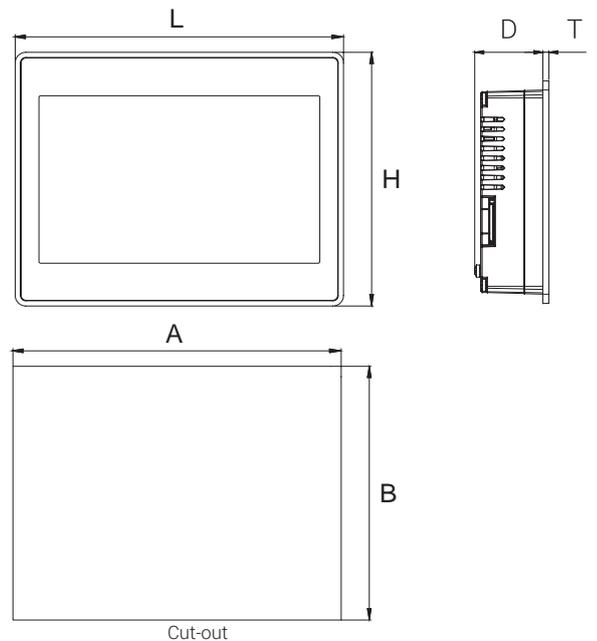| Model	Part Number	Description
eX705	+EX705U5P1	5" widescreen TFT color with multitouch projected capacitive touchscreen. 2 Ethernet ports, 1 serial port, 1 USB port. JMobile runtime.

eX707 - Technical Data

System Resources	
Display - Colors	7" TFT 16:9 LED - 16M
Resolution	800x480, WVGA
Brightness	500 Cd/m² 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

Cut-out
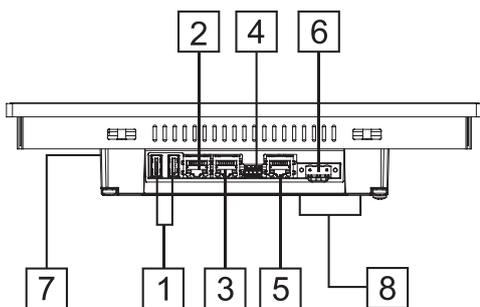
Ordering Information

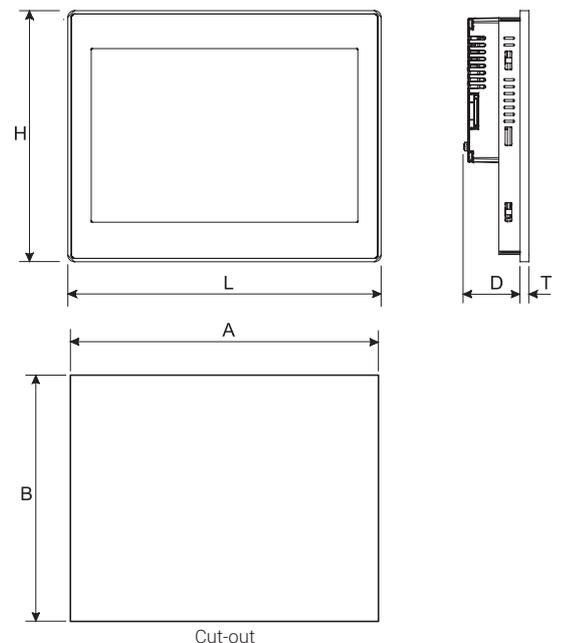| Model	Part Number	Description
eX707	+EX707U5P1	7" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

eX710 - Technical Data

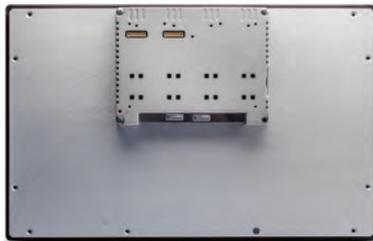| System Resources	
Display - Colors	10.1" TFT 16:9 LED - 16M
Resolution	1280x800, WXGA
Brightness	500 Cd/m² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	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

Cut-out
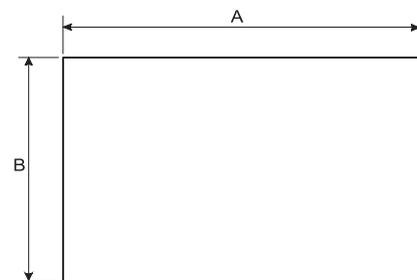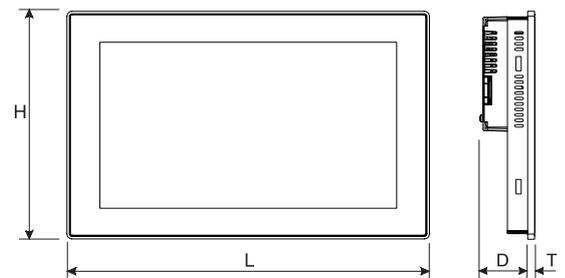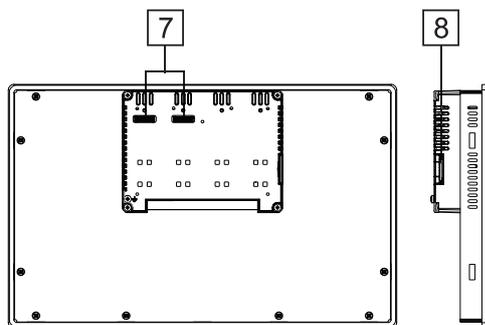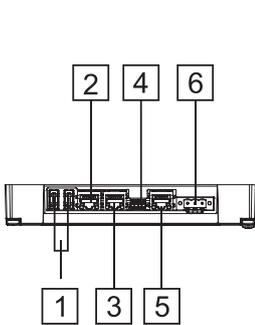
Ordering Information

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/m² 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

Cut-out

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.

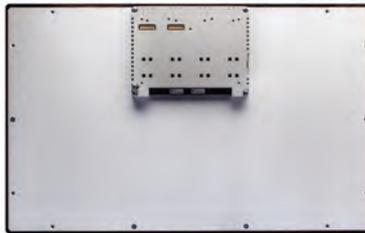| System Resources	
Display - Colors	21,5" TFT LED - 16M
Resolution	1920x1080, full HD
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
Real Time Clock, RTC Back-up, Buzzer	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
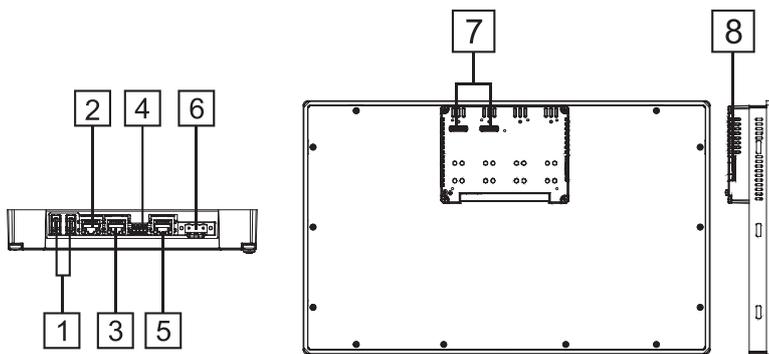7. 2 Expansion slots for plugin modules
8. SD Card slot

Cut-out

Ordering Information

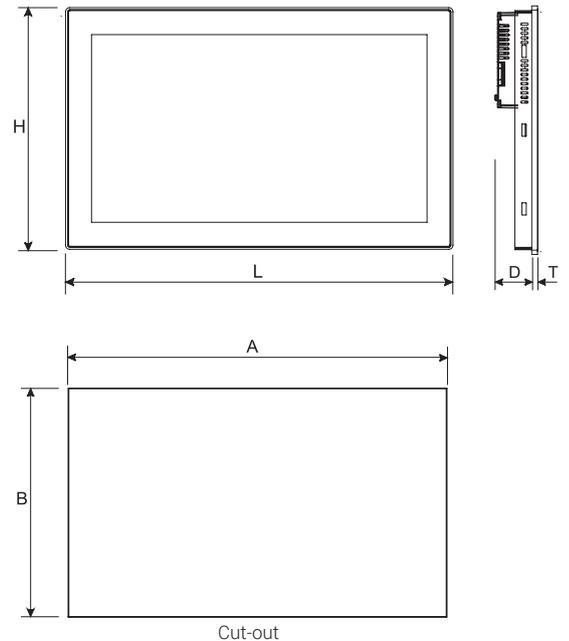| Model	Part Number	Description
eX721	+EX721U5P1	21.5" widescreen TFT color with multitouch projected capacitive touchscreen. 3 Ethernet ports, 1 serial port, 2 USB ports. JMobile runtime.

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 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

exorint.com

eXware Series

eXware Series

The eXware 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 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 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

The eXware 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 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 Industry 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.

eXware 703 - Technical Data

Functions	
Role/Application	Gateway, HMI, PLC, secure router - all data intensive IIoT applications
OT Networks	All Major Protocols: PROFINET, EtherNet/IP, EtherCAT, POWERLINK, Modbus, DNP3, BACnet, etc
Data Communication	OPC UA standard (pub/sub over TSN*)
Cloud Connectivity	Node-RED*, Bluemix*, Azure*, AWS*, Docker*
Operating System	Linux
Security	HTTPS, TLS
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+T	102 mm (4.01")
Weight	0.6 Kg
Mounting	TS35 DIN Rail
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: UL61010-1 / UL61010-2-201
RCM	Yes

*Road map for 2018
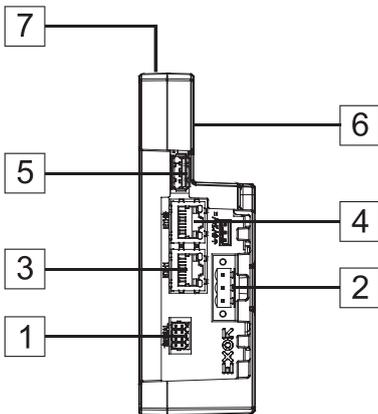
1 Serial port
2 Power supply
3 Ethernet port 1 (10/100 Mb)
4 Ethernet port 0 (10/100 Mb)
5 USB port 1
6 Expansion slots for plug-in modules
7 SD Card slot
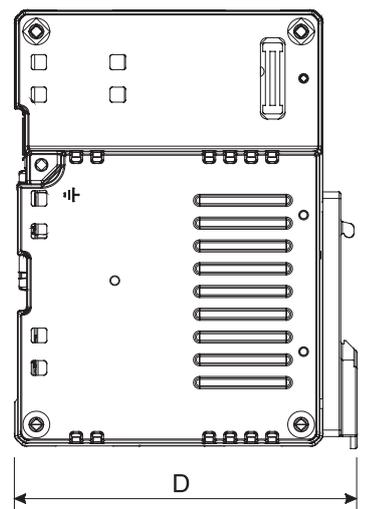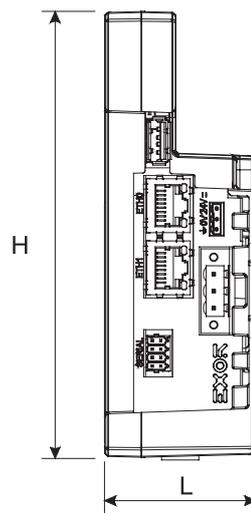
Ordering Information

Model	Part Number	Description
eXware 703	+EXW703U0P1	IoT controller and Gateway, 2 Ethernet ports, 1 serial port, 1 USB port

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 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

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.

eSMART
Series

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

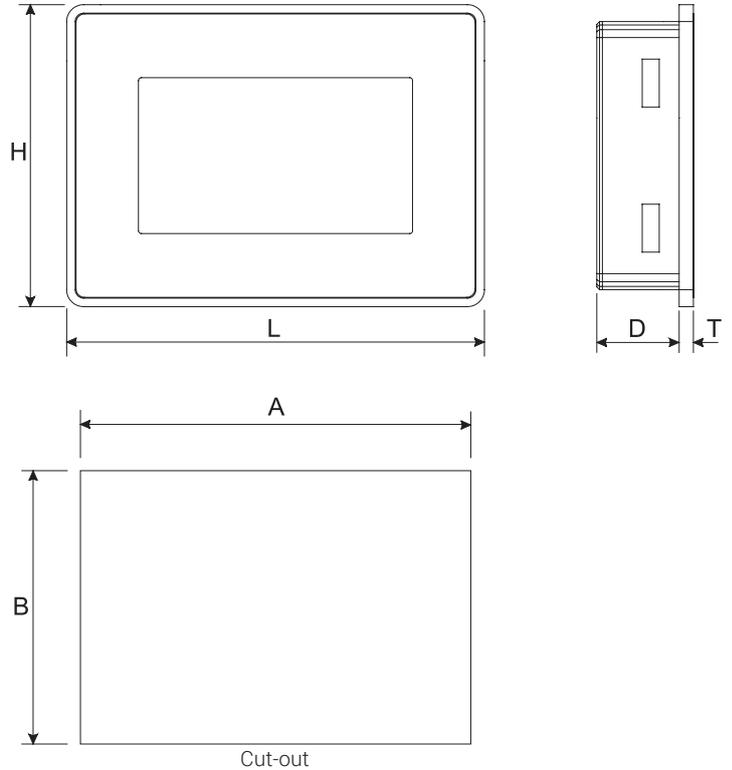| System Resources	
Display - Colors	4.3" TFT 16:9 - 64K
Resolution	480x272
Brightness	200 Cd/m² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 300 MHz
Operating System	Linux 3.12
Flash	2 GB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB 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*/18 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

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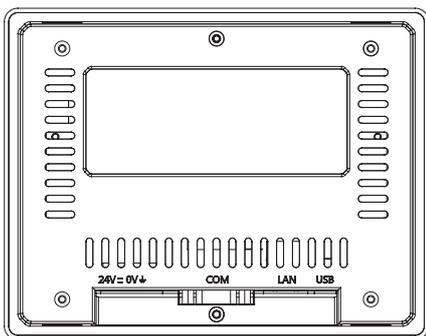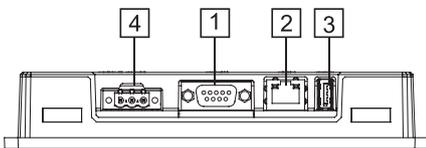3 USB port (vers. 2.0 - 1.1)
4 Power Supply

*Road map for 2018

Ordering Information

Model	Part Number	Description
eSMART04	+ESMA04U301	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/m² 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/m² 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
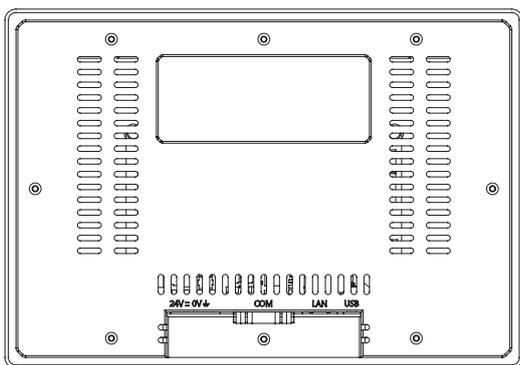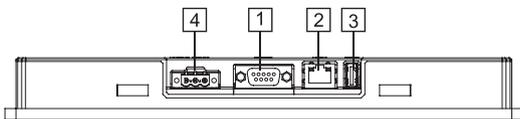2 Ethernet Port
3 USB port (version 2.0 - 1.1)
4 Power Supply
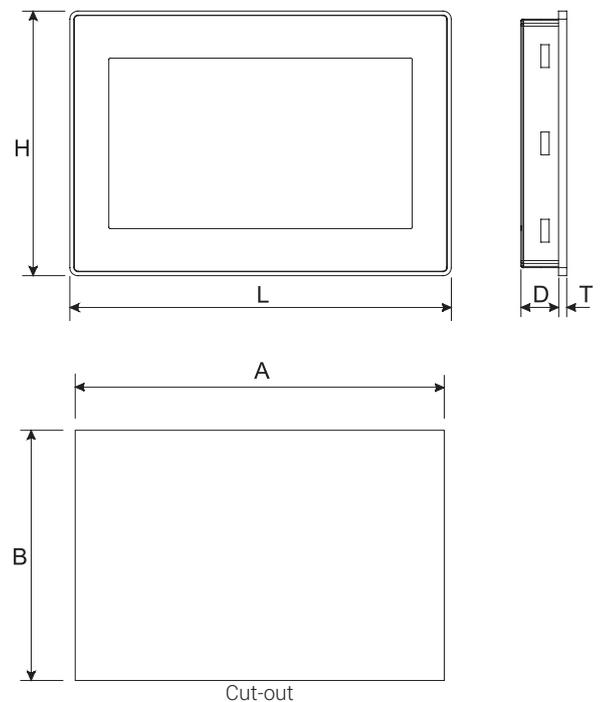
Ordering Information

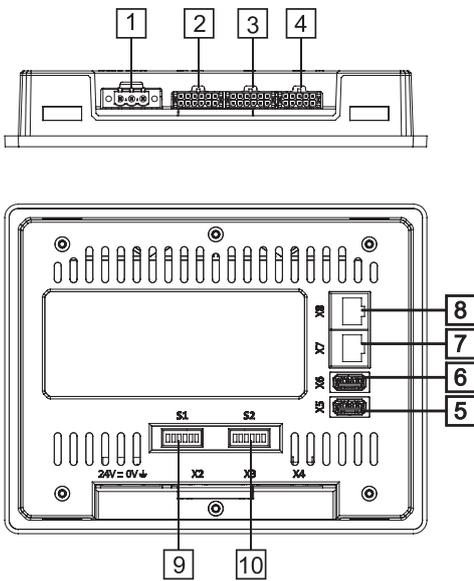| Model	Part Number	Description
eSMART10	+ESMA10U301	10" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime.

eSMART107 -Technical Data

System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m² 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	Electronic
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
DNV-GL	Yes
EU RO MR	Yes

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

Cut-out
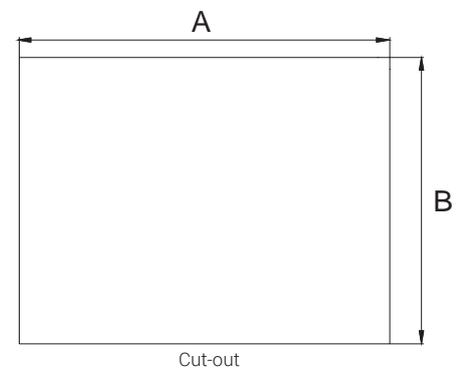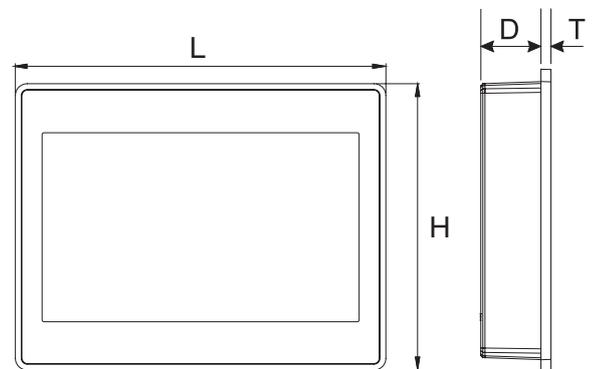
Ordering Information

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.

eTOP500 Glass Series

eTOP500 Glass Series

The Choice for Extreme Conditions

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

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.

- Proven Long Term Reliability
- Brilliant Displays Readable in Full Sunlight
- PCAP Touchscreen
- All Metal Enclosure
- Coated Board Protection
- Protection Class True IP69K
- 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 this product has 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 has lived up to this challenge, with a class leading performance rate it has become the **choice for extreme conditions**.
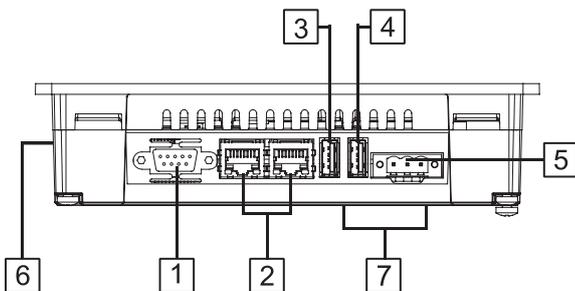
What sets the model apart is the combination of the rugged design with the use of JMobile software which renders the operation of the HMI extremely easy: an important point when the surroundings are difficult.

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.
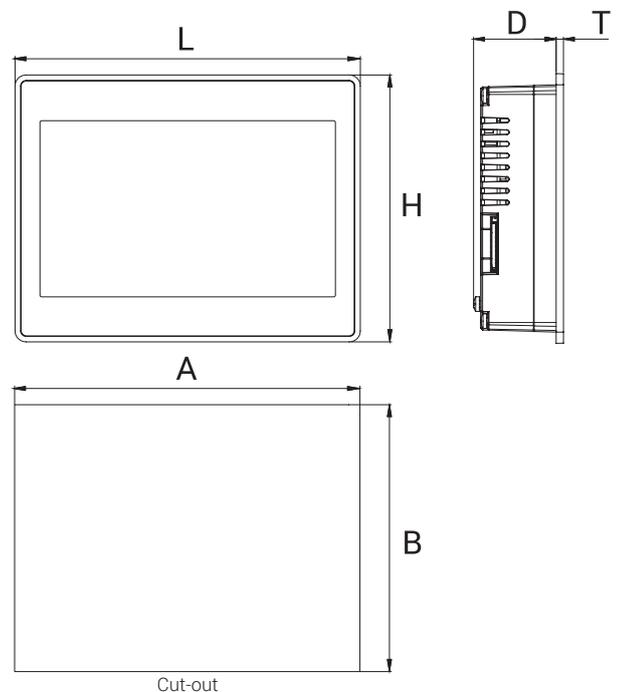
System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	400 Cd/m² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0
Flash	128 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, 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

Cut-out
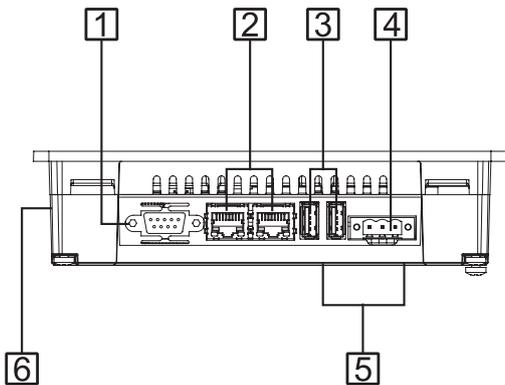
Ordering Information

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/m² 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 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
eTOP507MG	+ETOP507MU5P1	7" widescreen TFT color projected capacitive touchscreen with Ethernet and USB interfaces. JMobile runtime.

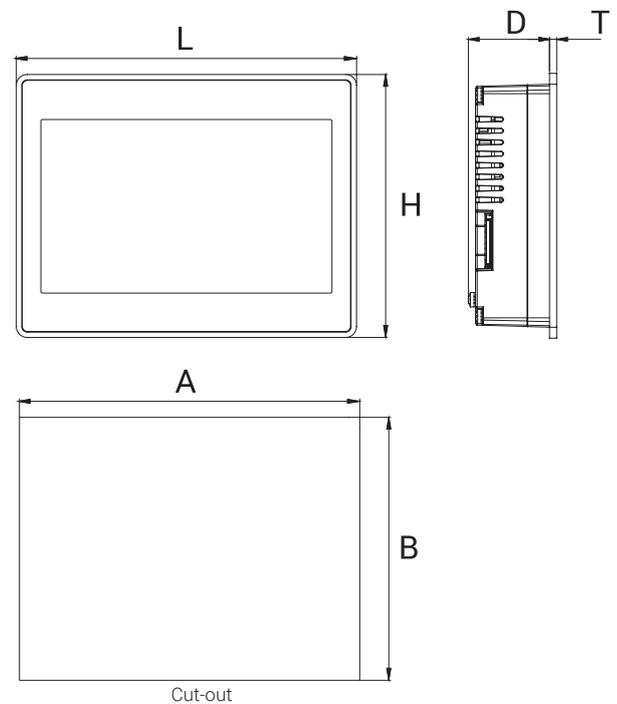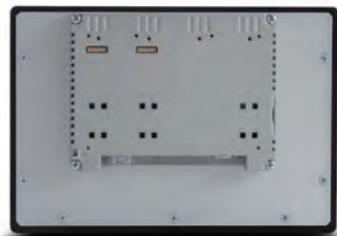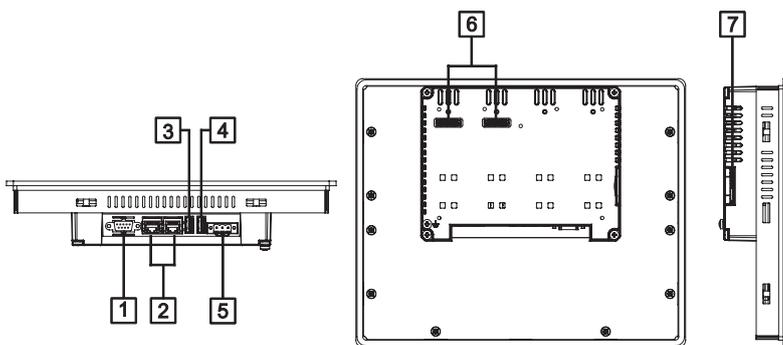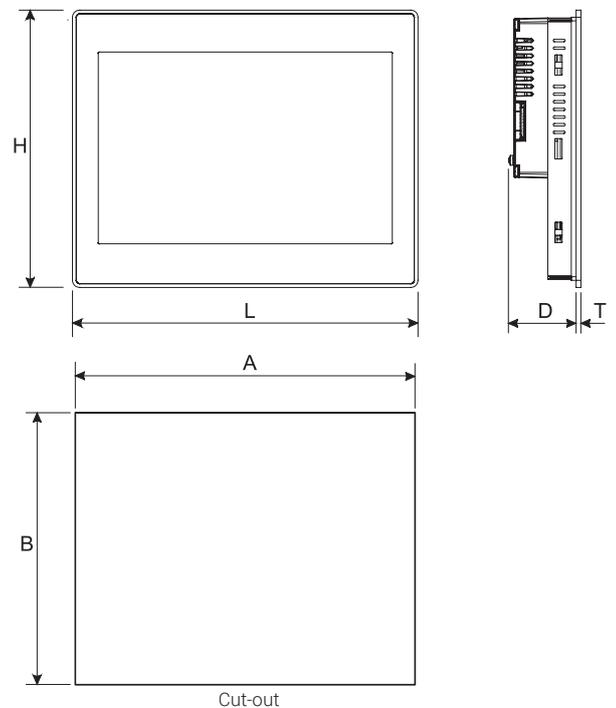# eTOP510G - Technical Data

System Resources	
Display - Colors	10.1" TFT 16:9 LED - 64K
Resolution	1280x800, WXGA
Brightness	600 Cd/m² 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

Cut-out
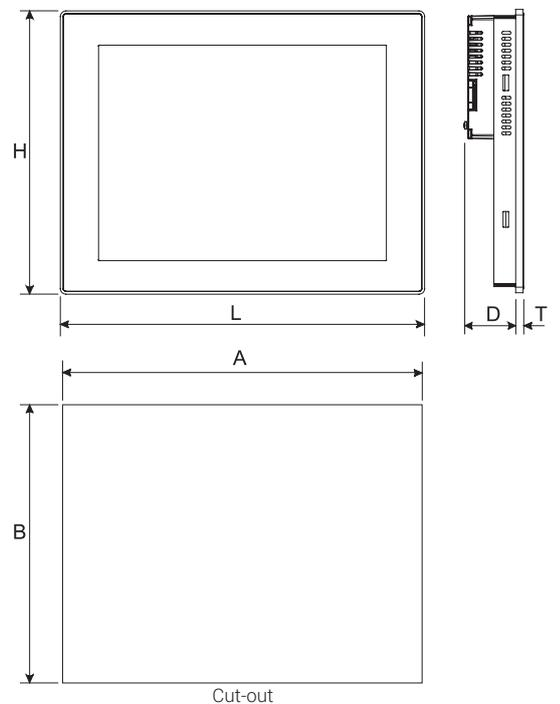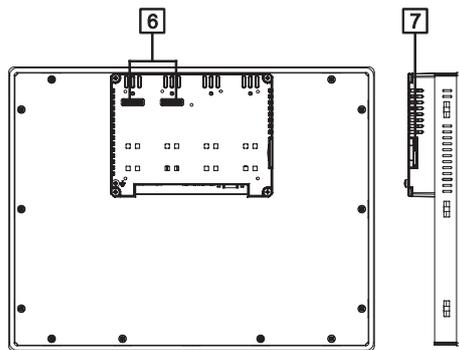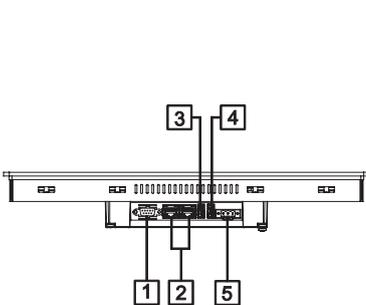
Ordering Information

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

eTOP515G - Technical Data
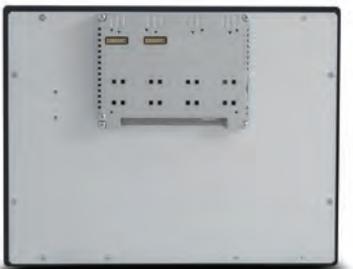
System Resources	
Display - Colors	15" TFT LED - 64K
Resolution	1024x768, XGA
Brightness	1500 Cd/m² typ
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, 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 Port
4 Power Supply
5 2x Expansion slots for Plugin modules
6 2x Plug-in slots
7 SD Card Slot for removable card

Cut-out

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 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

eTOP500 Series

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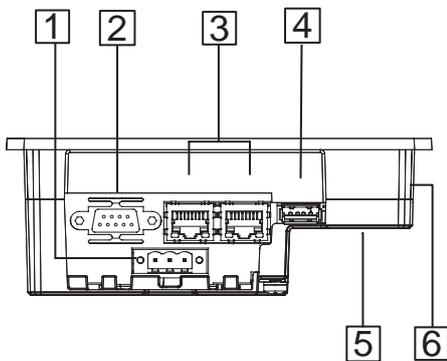
The eTOP Series 500 come with a choice of certifications and approvals that make them the **solution of choice for all requirements**.

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

eTOP504 - Technical Data

System Resources	
Display - Colors	4.3" TFT 16:9 LED - 64K
Resolution	480x272, WQVGA
Brightness	150 Cd/m² 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 Power Supply
2 Serial Port
3 2 Ethernet Ports
4 USB Port
5 Expansion slot for Plugin module
6 SD Card Slot

Cut-out
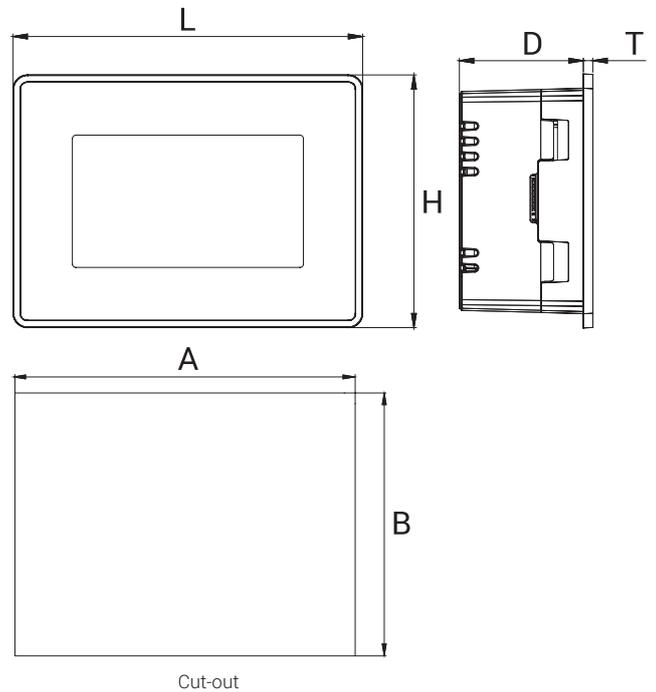
Ordering Information

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
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/m² 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
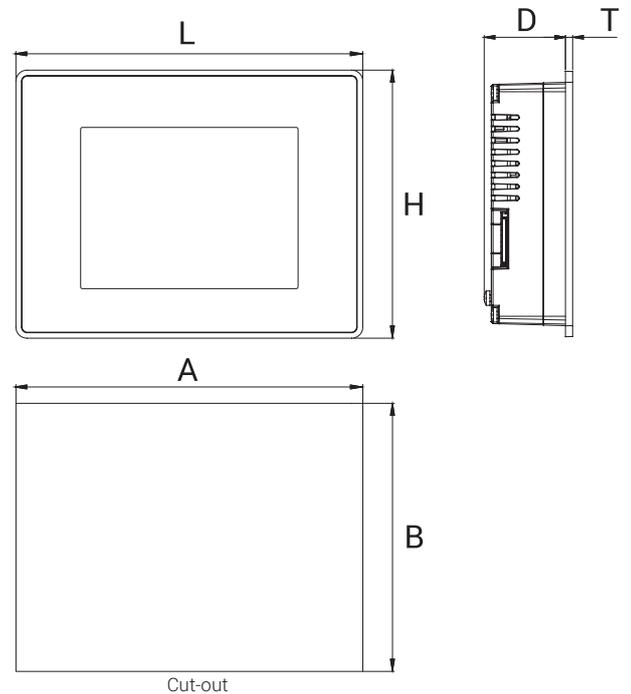7 2x Expansion slot for Plugin module

Cut-out

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/m² 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

Cut-out
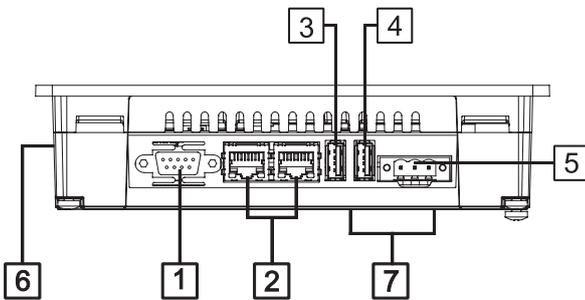
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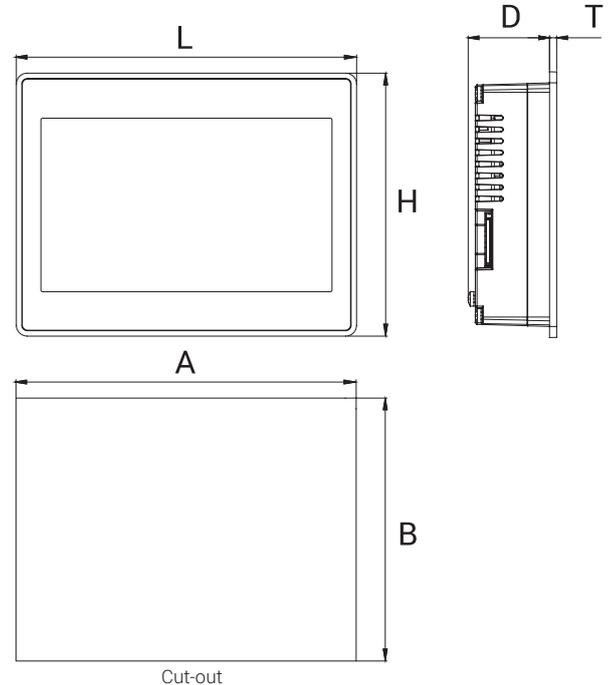| Model	Part Number	Description
eTOP507-White	+ETOP507U1P3	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP507-Silver	+ETOP507U2P3	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
eTOP507-Black	+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/m² 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

Cut-out
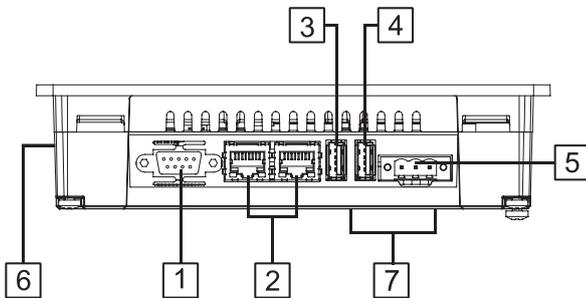
Ordering Information

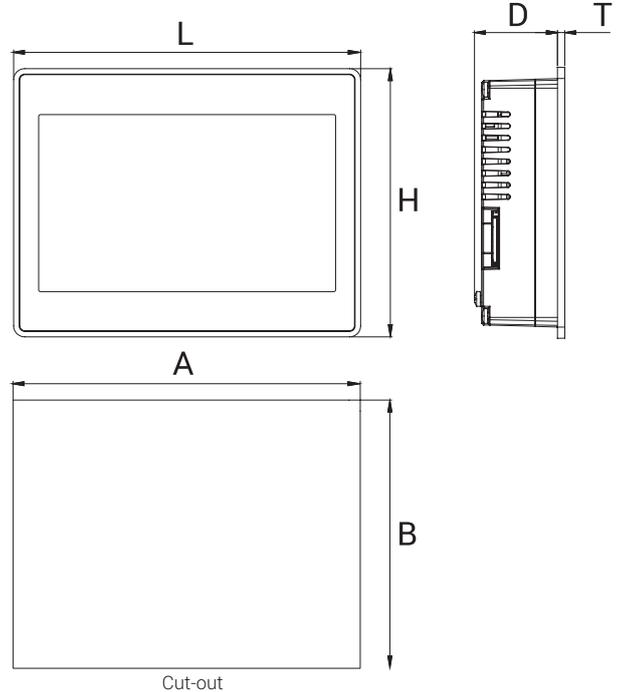| Model	Part Number	Description
eTOP507M-White	+ETOP507MU1P1	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. White front panel. JMobile runtime.
eTOP507M-Silver	+ETOP507MU2P1	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. Silver front panel. JMobile runtime.
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.

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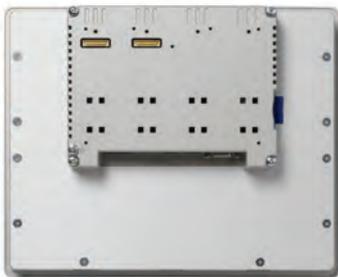| System Resources	
Display - Colors	10"4 TFT LED - 64K
Resolution	800x600, SVGA
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
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

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

Cut-out
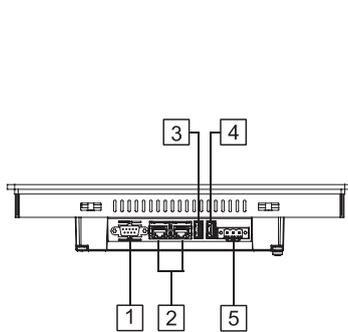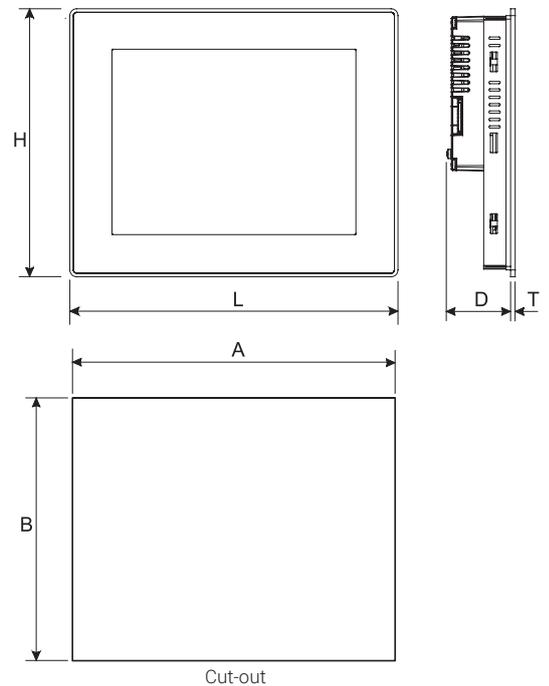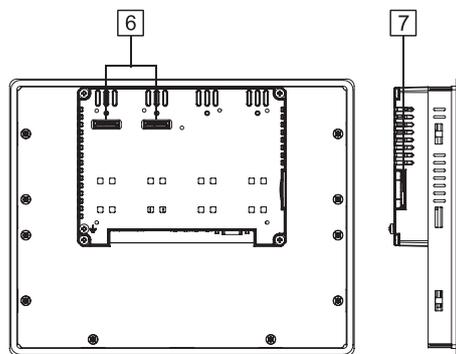
Ordering Information

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/m² 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

Cut-out
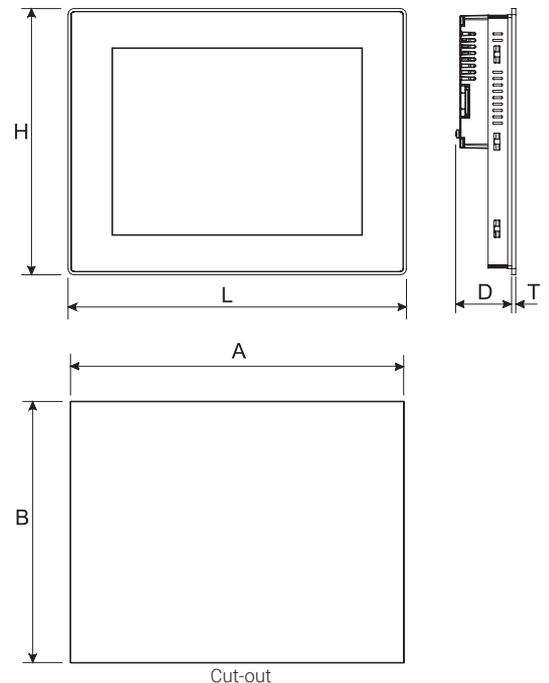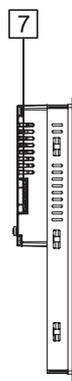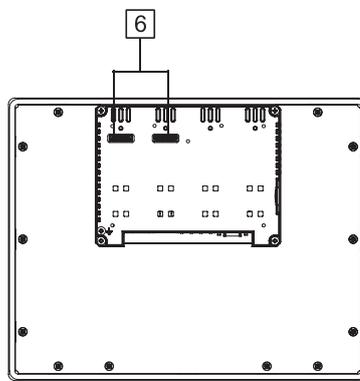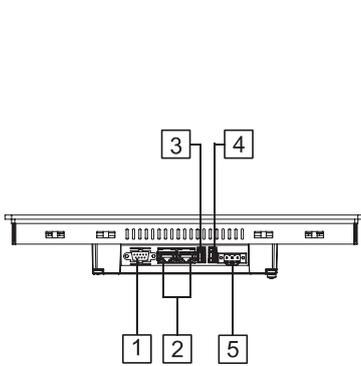
Ordering Information

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

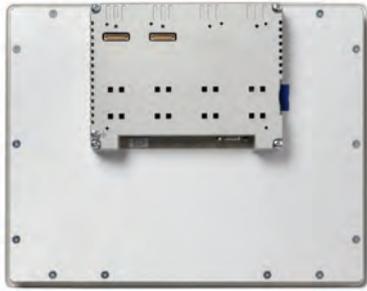| System Resources	
Display - Colors	13"3 TFT 16:9 LED - 64K
Resolution	1280x800, WXGA
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
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
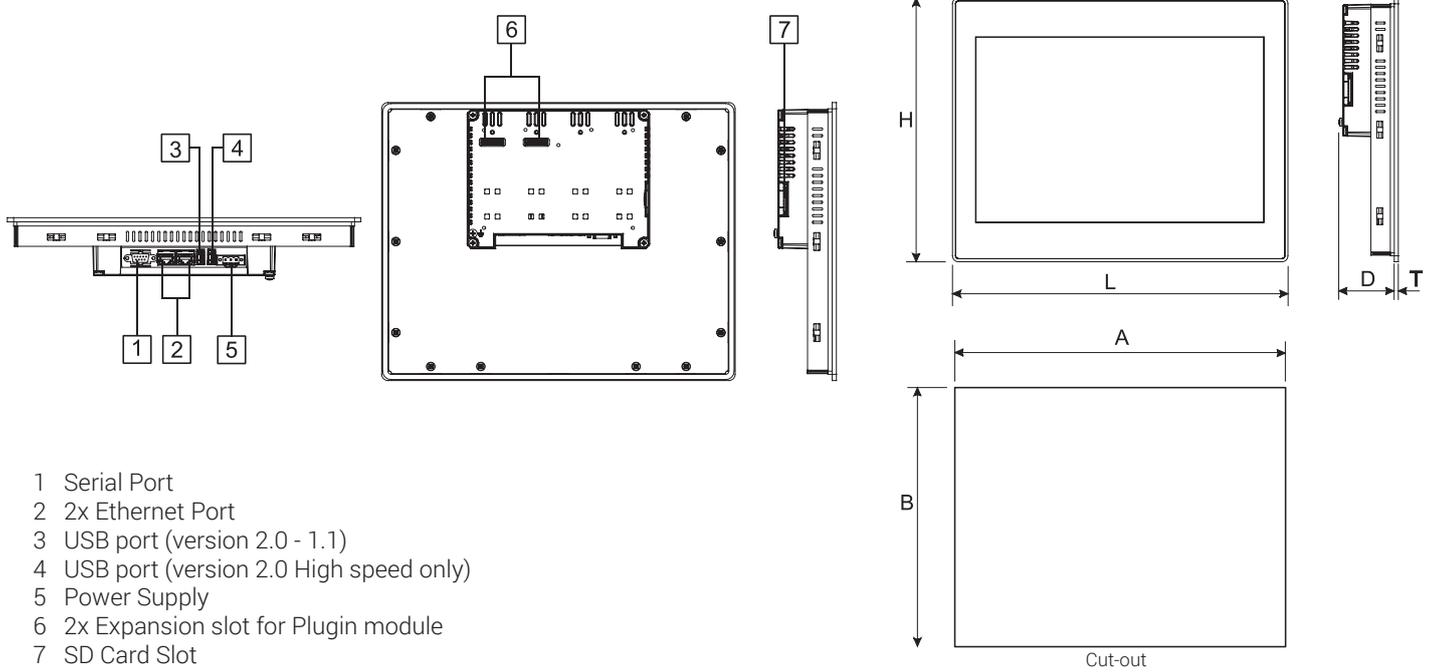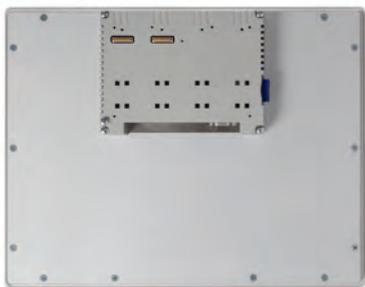6 2x Expansion slot for Plugin module
7 SD Card Slot

Cut-out

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

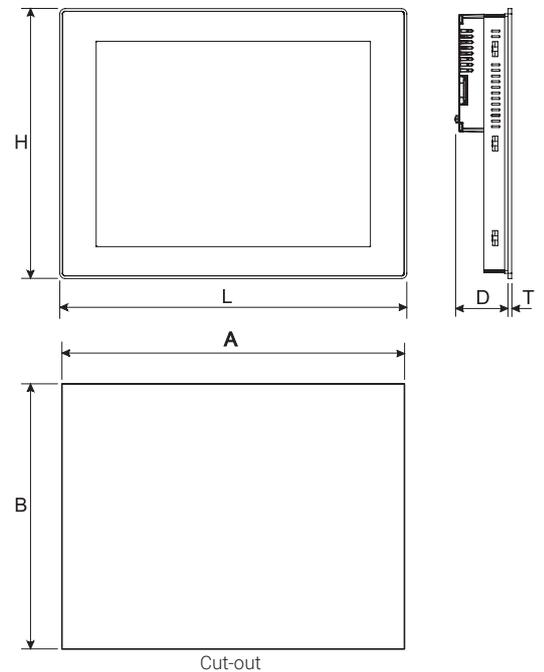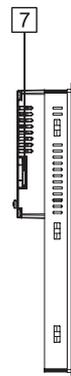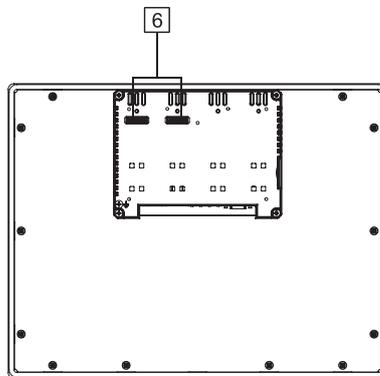| System Resources	
Display - Colors	15" TFT LED - 64K
Resolution	1024x768, XGA
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB DDR
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet 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	2 (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

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

Cut-out

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

Food & Beverage Series

State of the Art IP69

Where tough legislation requires that handling, preparation, processing and packaging of food is done to be extremely hygienic, the outstanding 7" Food and Beverage HMI from Exor is 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:
  DIN EN1672-2
  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 eTOP507 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 IP69**: 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**.

eTOP507FB - Technical Data

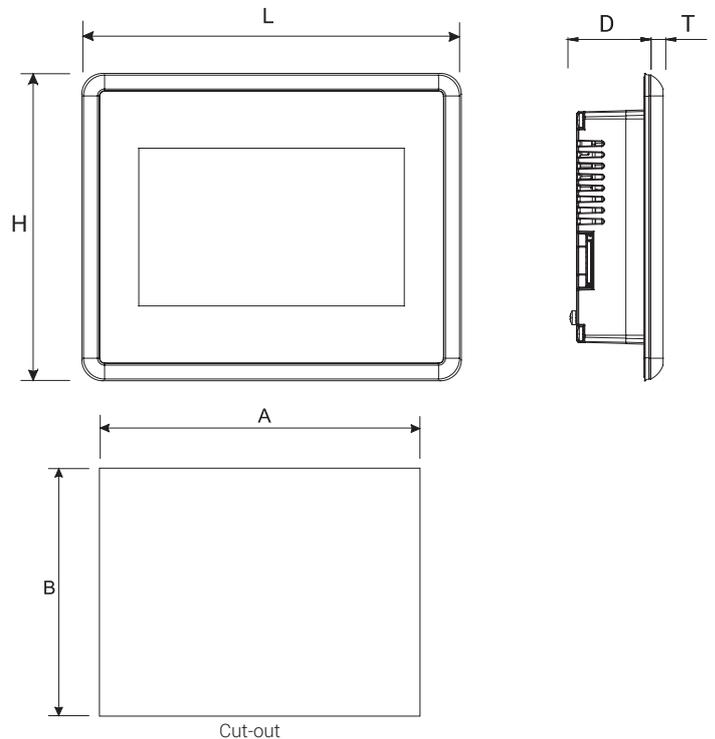| System Resources	
Display - Colors	7" TFT 16:9 LED - 64K
Resolution	800x480, WVGA
Brightness	400 Cd/m² typ.
Dimming	to 0%
Touchscreen	True Glass Projected Capacitive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0
Flash	256 MB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
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	0.9A at 24Vdc (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
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	44 + 12.3 mm
Weight	2.5 Kg
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL508

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
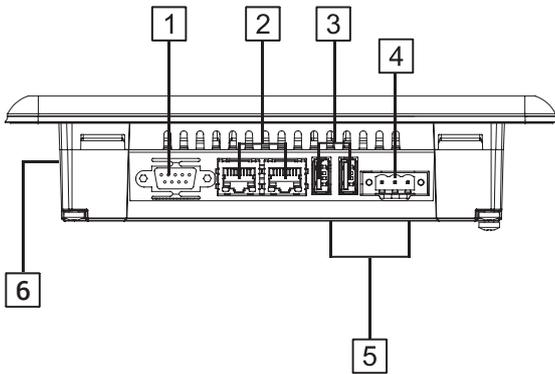
Ordering Information

Model	Part Number	Description
eTOP507MFB	+ETOP507MU1F1	7" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. Ethernet and USB interfaces. JMobile runtime. White front panel.
eTOP507MFB	+ETOP507MU4F1	7" widescreen TFT color projected capacitive touchscreen. Stainless steel bezel. Ethernet and USB interfaces. JMobile runtime. 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 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

exorint.com

Handheld Series

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 rigourous safety laws that govern the use of handheld devices.

- Certified Wireless Safety SIL2
- JMobile Integrated
- Easy to Program
- Stunning Design/Ergonomics
- Multiple Integrated Keys
- Potentiometers
- Handwheel
- State Selector
- Bluetooth Safety
- Additional WiFi Connectivity
- Magnets to Hang Devices in Convenient place
- Up to 50 m Connection for the H3

Overview

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.

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.

System Resources	
Display - Colors	TFT LED - 64K
Resolution	480x272
Brightness	300 Cd/m² 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)

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
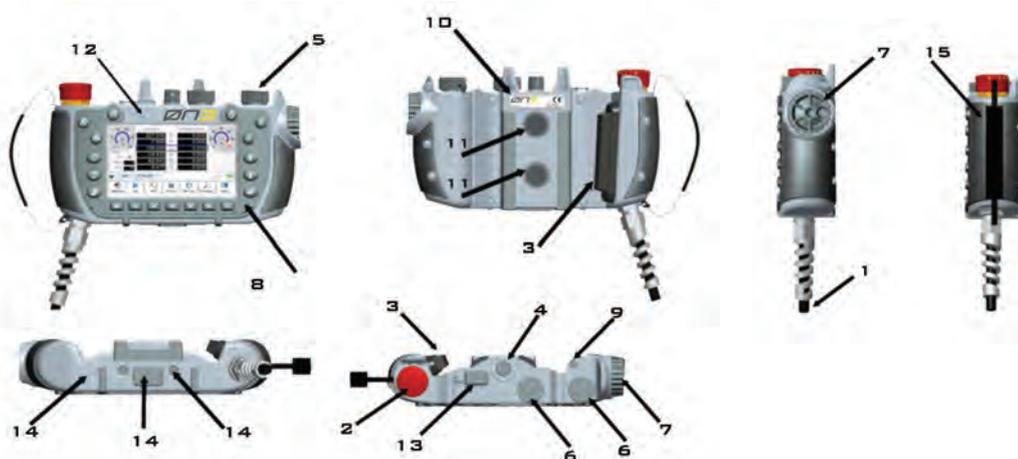
Ordering Information

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/m² 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
Bluetooh	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
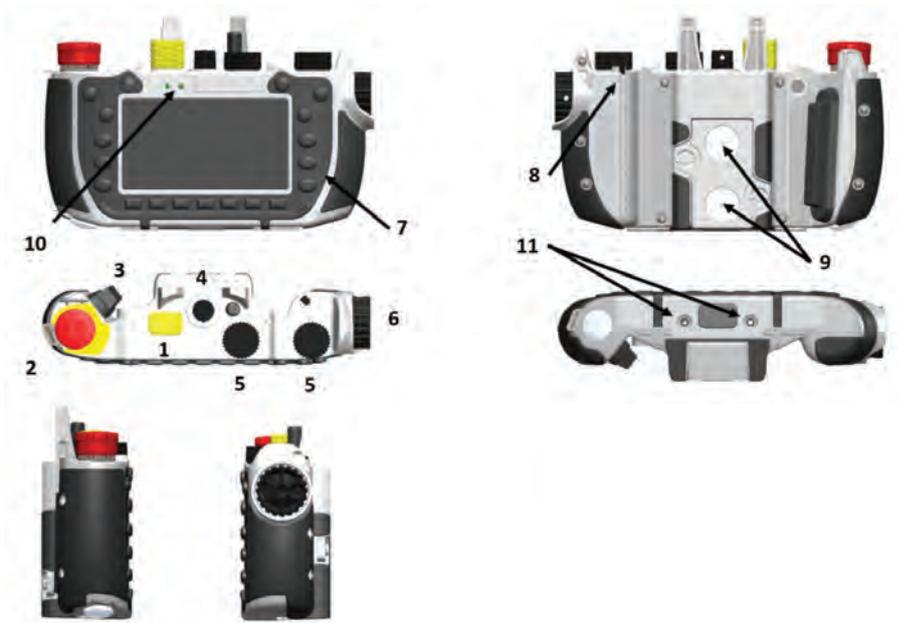
1 Token receptacle
2 Stop pushbottom
3 Enabling device
4 State Selector
5 Potentiometers
6 Handwheel
7 Membrane Keypad
8 Touchscreen pen
9 Mounting magnets
10 Status LED's
11 Battery Recharging Contacts

Ordering Information

Model	Part Number	Description
H4	+EP4H4SWJ0H0YE0	HMI H4 0N3 WIRELESS JM
H4	+EP4H00000A0YA0	ANTENNA + COUPLING TOKEN
H4	+EP4H00000R0YA0	RECHARGING STATION H4
H4	+EP4H00005C0YA0	CIS H4

IPC
Series

IPC Products for PC-based automation

EXOR International offers a complete range of fanless computers dedicated to automation.

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 applications.

The catalog includes a wide choice of:
• Panel PC
• Box PC
• Panel Monitor

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

PC offered by EXOR International are the ideal platform 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.

You will find detailed and up-to-date information on PC products in our web site: www.exorint.com

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