Product Catalogue

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English

Your Problem, Your Solution, Our Technology.

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

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

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

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

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

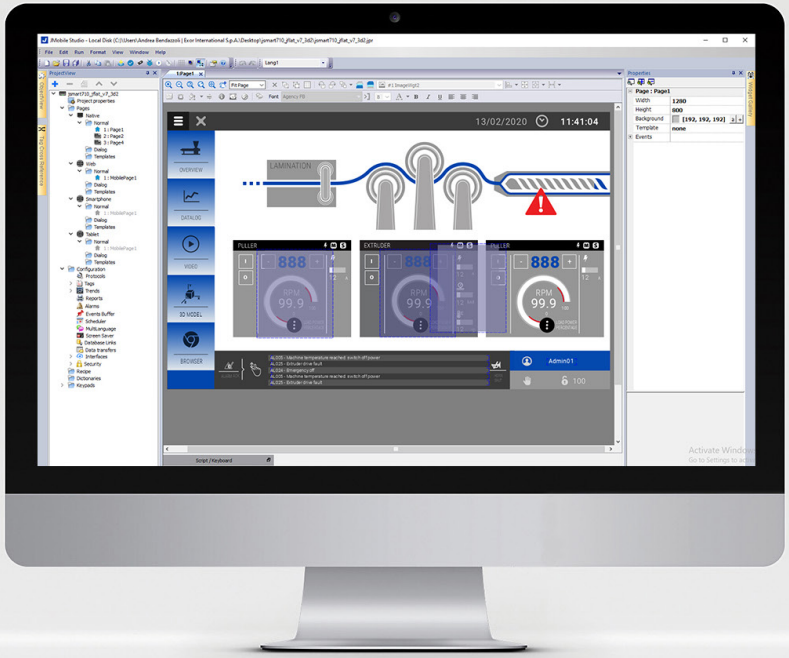
What EXOR International can offer you is the ability to securely acquire data from almost any approval critical location across multiple vendor and protocols, powerfully work with this data in real time at the edge and then send this data to a robust cloud to visualize, manipulate and analyse.

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

That's why EXOR International is a technology provider

Software

JMobile Suite



Visualization and Connectivity Software

The Only Industrial IoT Software you will ever need

In just one easily learned software suite, JMobile **completely covers** the connectivity from edge to cloud, device management, process management and data visualization essential for the all the edge to cloud levels in **any Industrial IoT platform architecture**.

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

Overview

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

For connectivity, with a fully integrated CODESYS PLC, JMobile permits communication to all I/O, Sensors, Motion devices via the significant protocols of PROFINET, Ether-CAT, POWERLINK, EtherNet/IP, Modbus amongst many others. Transmitted using the highly robust and secure OPC UA standard and soon pub/sub over TSN, **data is seam-lessly shared within the network of edge points as well as sending all data to higher Enterprise levels and external interfaces.**

This exacting communication universally envied as a real technical achievement does not, however, convey the total completeness of JMobile. Born from an industrial market need, this close contact with customers has remained so deeply ingrained in the constant development process that **the beautiful user experience is a defining attribute**. The ease of implementation, using evident stunning graphics elements built into a vast library, allows quick and uniquely defining clear visualization.

As the market moves more towards ever increasingly complex web applications, JMobile is ready. The JMobile client-server architecture is already conversant with current HTML5 web technologies and uses a QT engine and Scalable Vector Graphics, **JMobile4 Web**. This provides users with advanced control and remote supervision from any browser, any device (smartphone, tablet, or computer).

MQTT (MQ Telemetry Transport) is the publish/subscribe protocol designed for constrained devices and low-bandwidth, high-latency networks. It is a common protocol used for light load IIoT communication.

JMobile 4.0 comes with an efficient implementation that seamlessly connects to any MQTT broker, including those offered by providers such as Amazon, Exosite, IBM, Microsoft. The MQTT protocol has been built-in to JMobile runtime as a service with full data gateway capability.

You can easily configure automatic data push from field devices to the cloud. Data security is enforced by the use of TLS and X509 certificates.

CORVINA is an open IoT platform from Exor that connects any products, plants, systems, and machines, allowing data generated IIoT to be processed simply and intuitively with advanced analysis.

CORVINA Cloud is a PaaS (Platform as a Service) and RMM (Remote Monitoring and Management) system. JMobile 4.0 brings the first service for edge data collection to CORVINA.

The simplest approach you can imagine to bring your data to the cloud.

Unified programming approach for native and web HMI applications. Now it is easier than ever to create screens optimized for visualization on any client while saving programming time.

New JMobile project validation technology makes it simpler creating fully operational applications under all conditions.

The redesign and refactoring of existing JMobile function is the best way to improve programming efficiency while ensuring full compatibility. It is also a method to keep GUI up to date. In JMobile 4.0 you will find a great new design for:

- Project View with drag&drop to move pages within the project and multiple selections
- Tag Editor with unification of tag database and dictionary, customizable view, multiple editing of common properties, powerful search and synchronization of symbol files
- Alarm Editor with customizable view, powerful search and multiple editing of common properties

Reporting complex data, such as tables (alarms, trends, audits) and trend graphs is possible with the new PDF report function.
PDF files can now have a signature for data security, as required in demanding applications such as those compliant with 21 CFR Part 11.

Communication is always a central point in JMobile applications; even more now that IIoT data collection and edge data processing is becoming the focus in industrial applications.

New in JMobile 4.0 you will find the new CAN Direct protocol, the simplest and most powerful tool to create your own CAN protocols. Also very important is the new protocol for connecting to Siemens Simatic S7 PLCs with optimized data block programming.

Guiding Principles of Development

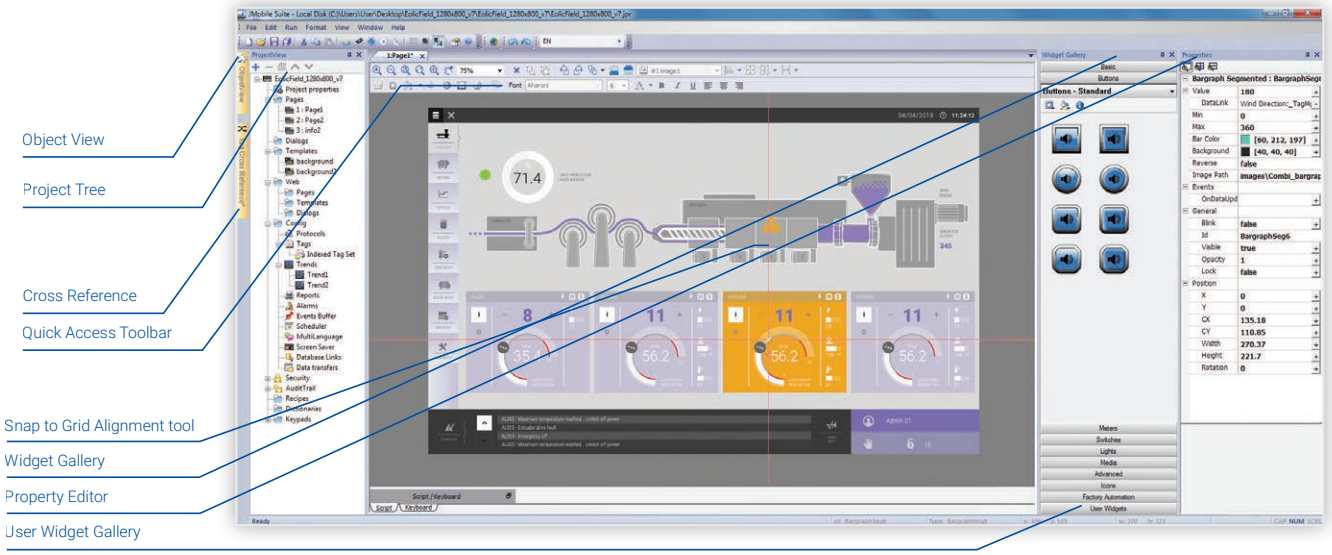
The **three principles that have guided and will continue to guide** the development of JMobile are:

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

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

Version 4.0 Improvements

- MQTT Service
- CORVINA Interface
- Unified programming of native and web pages
- Project validator
- Project View redesign
- Tag Editor redesign
- Synchronization with symbol files
- Alarm Editor redesign
- Tag Scaling and Type Casting
- Support of tables and graphs in PDF reports
- Signed PDF reports
- JM4web support for generic tables, audit tables, trend tables
- Trend data acquisition up to 10 samples/ second
- Trend data acquisition of alphanumeric tag
- Configurable column view for trend tables
- Up to 300 tags for a single datalog
- JS API functions for user management
- More rules for password definition
- Import/export text for message widget in XML
- Live tags in text widgets, Message widgets and alarms
- Historical alarms with collapsed view
- Regional settings as project properties



- BACnet server functions in BACnet protocol
- BACnet JS API function for device and object discovery at runtime
- Play videos from external data sources
- Sending SMSs with PLCM09

New Protocols

- Siemens S7 Optimized Datablocks
- CAN Direct
- IDEC Maintenance
- Keyence KV
- DMX512
- Robox BCC/31
- EATON Suconet K

Pure Web Technology

JMobile 4 Web is the seamless connection between Industrial control applications and ubiquitous mobile devices such as smart phones and tablets.
Developed ahead of the market's vision in 2010 and continuously updated ever since using the very same guiding principles for JMobile, it now provides the most comprehensive Pure Web Technology available.
Designed and maintained by EXOR, a company with 45 years experience in the industrial sector.

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

Overview

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

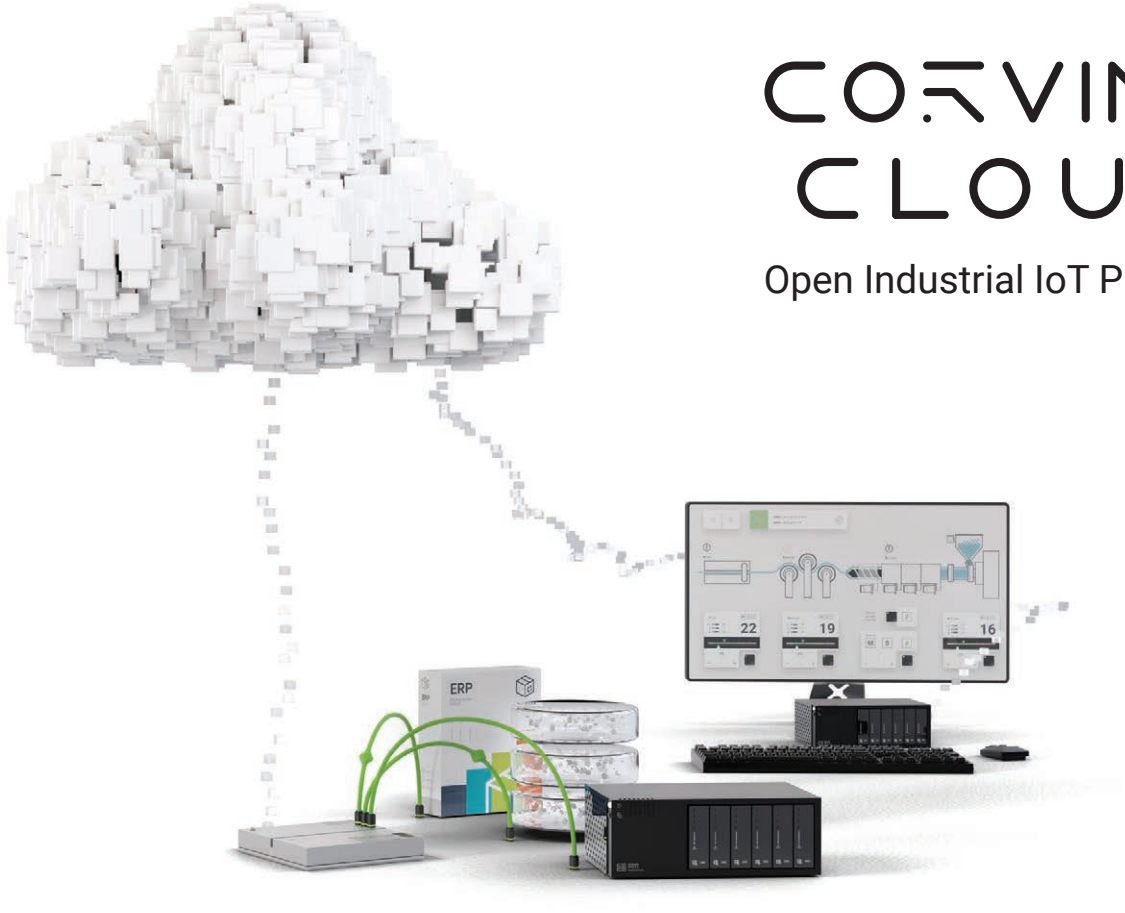
With JM4web you can have **instant Web access to JMobile applications** via the integrated Web server included in all JMobile runtime systems.

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

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

Cloud

Corvina Cloud 1.0 and 2.0



CORVINA CLOUD

Open Industrial IoT Platform

Connectivity Management

CORVINA Cloud 1.0

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.

Benefits

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

Recent Updates Have Included

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

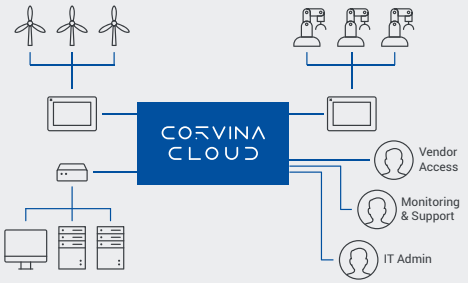
VNC runtime Password:
Possibility to enable runtime password for VNC connections

Light White Label Branding:
Possibility to customise logos and portal login address for a first level organisation

Cloud credential and other configuration setup using USB: Possibility to set CORVINA Cloud 1 credential and other parameters using script file on USB

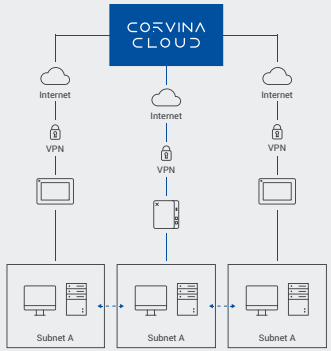
Network Address Translation (NAT) rules on eXware, eX700 using USB: Possibility to set NAT rules on eXware and eX700 devices using a script file on USB which then functions with CORVINA Cloud 1

PLCM09 3G modem Compatibility:
Usage of the PLCM09 3G modem with CORVINA Cloud 1



Advanced VPN for IIoT Security

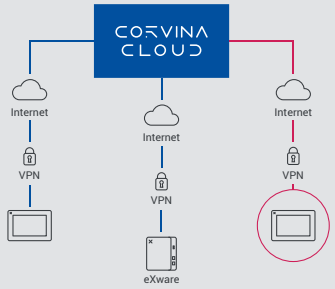
A powerful and highly scalable solution that offers **advanced VPN capabilities** with a simple web-based interface allows all your remote devices, networks and users to be able to communicate seamlessly. Industry standard **encryption technology** ensures your data stays protected in transit for complete IoT security. Granular role-based access permissions allow **users to only gain acces to required resources and nothing else.**



Subnet Mapping

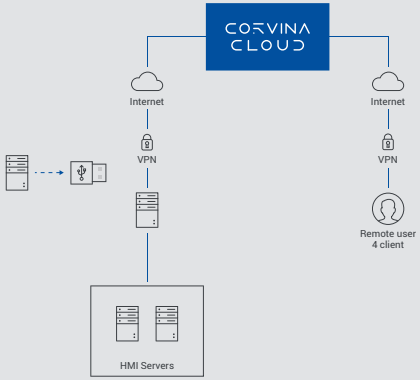
One of the most common challenges industrial networks are faced with is the problem whereby multiple locations have the same subnet, making it impossible to implement a central VPN management tool without significant intervention.

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



Isolating for Maintenance and Installation

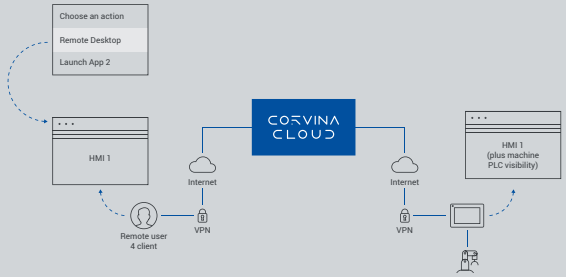
CORVINA Cloud 1.0 uses a SSL VPN technology (OpenVPN) to allow both installation and maintenance to be made remotely and highly securely.
Non functioning devices can be identified from the portal and isolated to be worked on. This can help save time and money and minimize network downtime.



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.

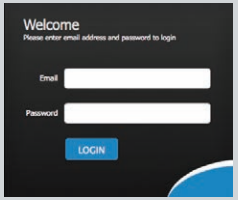
With the USB Provisioning tool, devices can be easily pre-configured on a USB stick and shipped out to their location for a simple, secure installation.



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.



Web access using standard browser

CORVINA Cloud uses web proxy technology to allow usage of standard browser to connect to portal with security HTPPS 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

Open Industrial IoT Platform

CORVINA Cloud 2.0

CORVINA Cloud is a **PaaS** (Platform as a Service) and **RMM** (Remote Monitoring and Management) system.
It is the cloud-based, Open Industrial IoT platform that provides the technology you need for the industrial world. It is The **Industrial Cloud**.
It connects any products, plants, systems, and machines, **be they new or legacy**. It allows the data generated by the Internet of Things (IoT) to be processed simply and intuitively with advanced analysis. It **bridges layers between IT and OT architecture**, providing effective tools to access all the industry 4.0 benefits, such as asset performance management, predictive maintenance and OT remote monitoring.
Our Technology that allows you to implement at scale and securely **Your solution to Your problem**: how to maintain competitiveness, grow and maybe just to disrupt.

CORVINA CLOUD

Open Industrial IoT Platform

CORVINA Cloud
seeks the
Information
of Things

Usability

EXOR has a long history of making Industrial software. Given the crucial role the software plays in complex and essential environments, **EXOR has always been concerned with the effectiveness, efficiency and satisfaction with which specified users achieve precise goals in particular contexts.**

CORVINA Cloud continues this tradition.

Upon the first startup, the user will find it easy to **become familiar** and able to use CORVINA Cloud's user interface. It is easy for the user to **achieve their objective, navigating smoothly** between the various high-level functions of the platform. Moreover, software design has also made it **easy to recall the multiple services available** on CORVINA Cloud as well as how to use them on subsequent visits.

Deep consideration as to how our clients will use the software leads to a **rapid onboarding of the platform and hence faster access to industry 4.0 benefits**.

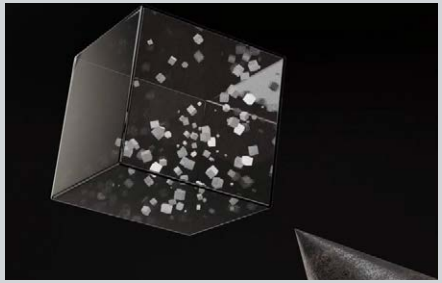
Utility

CORVINA Cloud has been designed with a level of functionality that you have come to expect from an innovative engineering company as EXOR. Much effort has been made to offer **all the instruments to ensure CORVINA Cloud meets the needs of the user.**

Users will suddenly without complexity, be able to connect devices to any cloud, to set up roles with associated access limits and to produce multi-level alarms amongst many other functions.

Incredibly within a short time, users will have **powerful asset management performance and maintenance management applications** that will make you wonder why other cloud providers charge for these applications.

Functional Integrity



Reliability and high availability have always been a major concern in distributed systems.

Providing highly available and reliable services in cloud computing is essential for maintaining customer confidence and satisfaction and preventing revenue losses. EXOR is a long term provider of Industrial strength products and software.

From the beginning CORVINA Cloud was designed with a solid infrastructure but of more importance have been **the automatic procedures that constantly monitor the state of the system and predict and prewarn of any possible future issues.**

Visual Design

Although not often thought of in the industrial sector, visual design is **a crucial element of a thoughtfully made software.**

CORVINA Cloud is used often in white label with sub organisations; the ability to customise the product is essential.

Aesthetics and usability have a positive correlation which helps to communicate your brand to the market.

The visual design of CORVINA Cloud provides a balance between visual appeal, usability and utility unseen in the industrial space.

Utility Benefits

PLUG & CONNECT

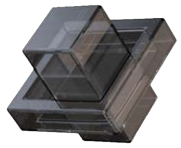
Simplifies the process of connecting any device to the cloud

MULTITENANT MANAGEMENT

Easy upgrade, easy customisation and ongoing cost savings

FINE GRAIN ACCESS

Highly specific access constraints to data and functions



REST API

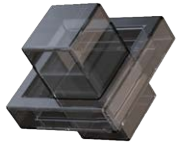
Offering great deal of flexibility. Data is not tied to resources or methods.

REMOTE MANAGEMENT

Proactive Service based on Alarm, Remote Support to the Customer

DATA MODELING

Optimize the Device connection allowing the creation of Profiles for machine models

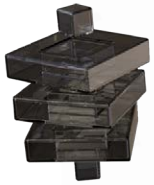


CUSTOM SDK

Customize Dashboard with implementing Widget, KPI, data analisys functions

GEOLOCATION

Possibility to implement all the functions related to the positioning of the device (Route, GeoFencing, ...)



ALARMS

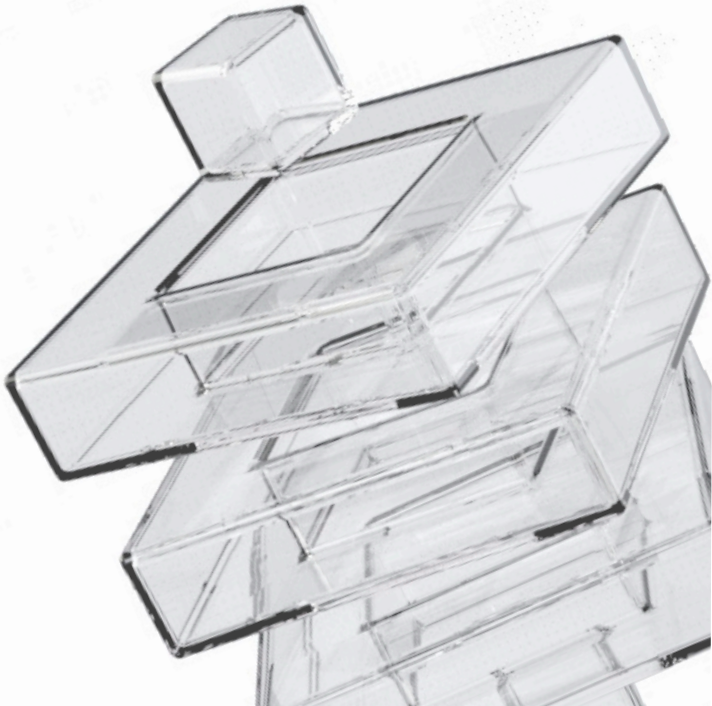
Protect plant uptime and safety minimizing the number and impact of abnormal situations thanks to the prompt information received by Email notifications.

DASHBOARD CREATOR

Autonomously increase profits creating dashboard that shows you relevant data for your business

UI CUSTOMIZATION

Placing the visual design in line with your brand provides good secondary sales



Hardware

HMI, Gateways, IoT Controller, Panel PC

IoT Gateways

eXware Series

	eXware703	eXware707	eXware707Q
System Resources			
CPU	ARM Cortex-A8 1 GHz	ARM Cortex-A9 800 MHz dual core	ARM Cortex-A9 800 MHz quad core
Operating System	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	8 GB
RAM	512 MB	1 GB	2 GB
RT Clock, RTC Back-up, Buzzer	Yes	Yes	Yes
Interface			
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	2 (Host v. 2.0, max. 500 mA)	2 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 2 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes	Yes	Yes
Expansion	1 slot for plug-in modules	2 slots for plug-in modules	2 slots for plug-in modules
Ratings			
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.35 A max. at 24 Vdc	0.5 A max. at 24 Vdc	0.55 A max. at 24 Vdc
Input Protection	Electronic	Electronic	Electronic
Battery	Yes	Yes	Yes
Environment Conditions			
Operating Temp	-20° to +60 °C - Plug-in modules and USB devices may limit max temperature to +50 °C		
Storage Temp	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Operating/Storage Humidity	5 - 85% RH, non condensing	5 - 85% RH, non condensing	5 - 85% RH, non condensing
Protection Class	IP20	IP20	IP20
Dimensions and Weights			
Faceplate LxH	45x134 mm (1.77x5.27")	44 x 174 mm	44 x 174 mm
Depth D	102 mm (4.01")	144 mm	144 mm
Weight	0.6 Kg	0.7 Kg	0.7 Kg
Mounting	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)
Approvals			
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments, EN 60945, EMC Emissions and Immunity for marine applications		
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
IECEx	Zone 2: Ex nA IIC T5 Gc	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03	Zone 2: Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
ATEX	Zone 2: II 3 G Ex nA IIC T5 Gc	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03	Zone 2: II 3 G Ex nA IIC T5 Gc / -20°C ≤ Tamb ≤ +60°C. Limited to 0°C ≤ Tamb ≤ +50°C with PLIO03
DNV-GL	Yes	Yes	Yes
RCM	Yes	Yes	Yes
Ordering Code	+EXW703U0P1	+EXW707U0P1	+EXW707QU0P1

Smart Edge

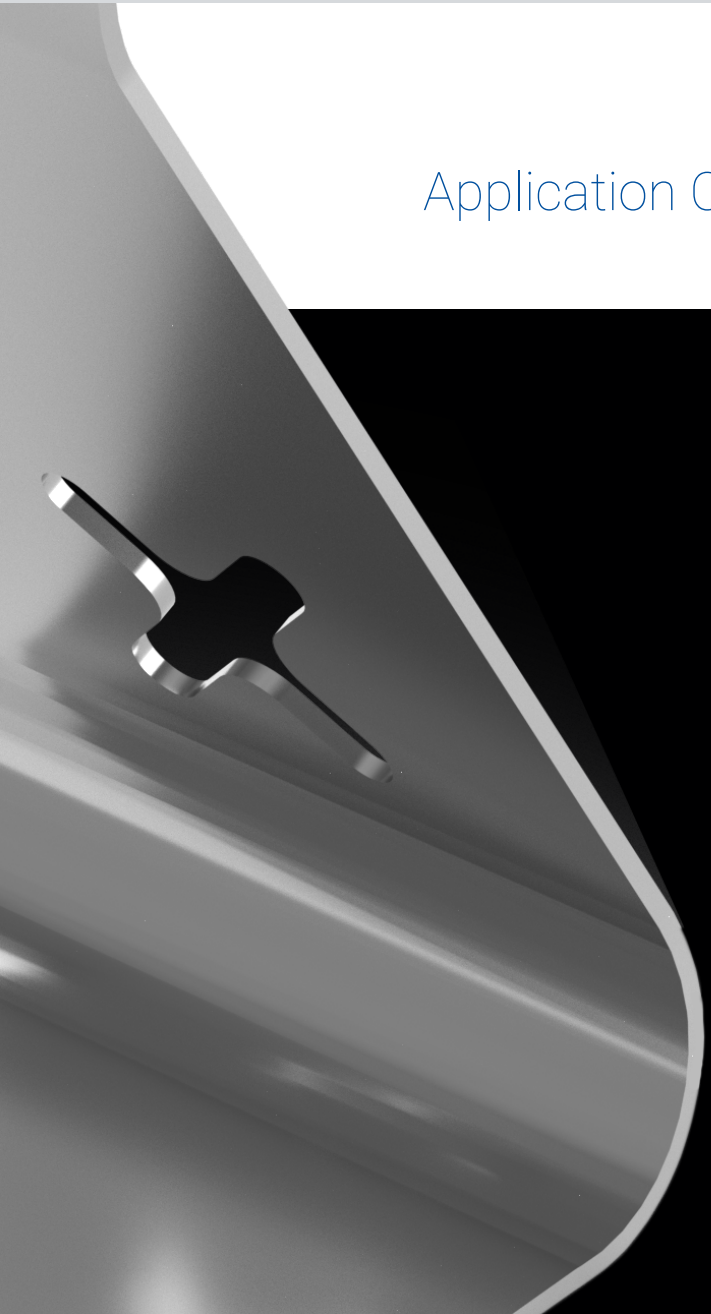
JSmart Series

	JSmart707 NFC
System Resources	
Display - Colors	7" TFT – 16M
Resolution	1024x600
Brightness	400 cd/m^2 typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating system	Linux RT
Flash	4 GB
RAM	1 GB
FRAM	64 KB
RTClock, RTC Back-up	Yes
Interface	
Ethernet port	10/100 PoE
USB port	1 (Host V2.0, max. 50 mA, available with special cable)
LED	1 RGB
Sensors	Temperature, 3-Axis Accelerometer
Wi-Fi	IEEE 802.11a/b/g
NFC	ISO/IEC 14443A
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3af PoE
Power Consumption	9 W
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temp	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C
Operating/Storage Humidity	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables) Type: 1, 12, 4x
Dimensions and Weights	
Faceplate LxH	195.2x131.6mm (7.68x5.18")
Depth D+T+T	16.5mm (0.06")
Weight	0.7Kg
Approvals	
CE	Approvals for installation in industrial environments: EN 62311, EN 61010-1, EN IEC 61010-2-201, EN 61000-6-2, EN 61000-6-4, ETSI EN 300 330, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-17, ETSI EN 300 328
Ordering Code	+JS707BB2U5P1

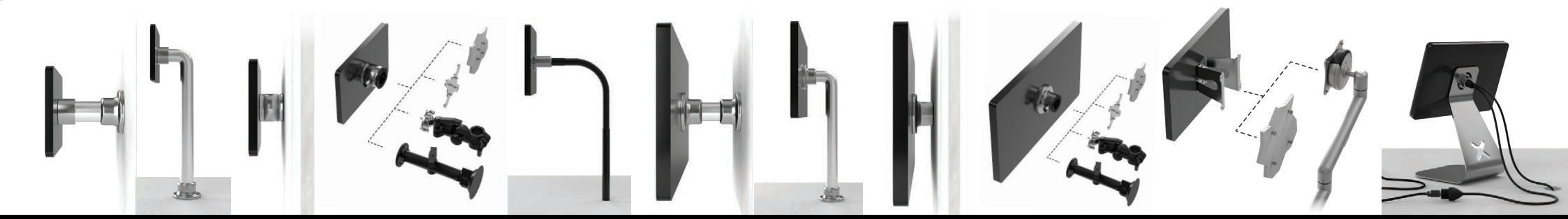
	JSmart705	JSmart707	JSmart710	JSmart715	JSmart721
System Resources					
Display - Colors	5" TFT – 16M	7" TFT – 16M	10.1" TFT – 16M	15.6" TFT – 16M	21.5" TFT – 16M
Resolution	800x480	1024x600	1280x800	1366x768	1920x1080
Brightness	300 cd/m^2 typ.	400 cd/m^2 typ.	400 cd/m^2 typ.	400 cd/m^2 typ.	400 cd/m^2 typ.
Dimming	to 0%	to 0%	to 0%	to 0%	to 0%
Touchscreen	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch
CPU	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A9 quad core - 800 MHz	ARM Cortex-A9 quad core - 800 MHz
Operating system	Linux RT	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	4 GB	8 GB	8 GB
RAM	1 GB	1 GB	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB	64 KB
RTClock, RTC Back-up	Yes	Yes	Yes	Yes	Yes
Interface					
Ethernet port	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE
USB port	1 (Host V2.0, max. 50 mA, available with special cable)	1 (Host V2.0, max. 50 mA, available with special cable)	1 (Host V2.0, max. 50 mA, available with special cable)	1 (Host V2.0, max. 50 mA, available with special cable)	1 (Host V2.0, max. 50 mA, available with special cable)
LED	1 RGB	1 RGB	1 RGB	1 RGB	1 RGB
Sensors	Temperature, 3-Axis Accelerometer	Temperature, 3-Axis Accelerometer	Temperature, 3-Axis Accelerometer	Temperature, 3-Axis Accelerometer	Temperature, 3-Axis Accelerometer
Wi-Fi	No	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
NFC	No	No	No	No	No
Buzzer	Yes	Yes	Yes	Yes	Yes
Ratings					
Power supply	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3at PoE+	IEEE 802.3bt 4PPoE
Power Consumption	6 W	9 W	12 W	19 W	32 W
Battery	Yes (rechargeable)	Yes (rechargeable)	Yes (rechargeable)	Yes (rechargeable)	Yes (rechargeable)
Environment Conditions					
Operating Temp	-20° to +55° C (vertical installation)	-20° to +55° C (vertical installation)	-20° to +55° C (vertical installation)	-20° to +55° C (vertical installation)	-20° to +55° C (vertical installation)
Storage Temp	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing	5-85% RH, non-condensing	5-85% RH, non-condensing	5-85% RH, non-condensing	5-85% RH, non-condensing
Protection Class	IP67 (requires appropriate accessories and cables) - Type: 1, 12, 4x	IP67 (requires appropriate accessories and cables) Type: 1, 12, 4x	IP67 (requires appropriate accessories and cables) Type: 1, 12, 4x	IP67 (requires appropriate accessories and cables) Type: 1, 12, 4x	IP67 (requires appropriate accessories and cables) Type: 1, 12, 4x
Dimensions and Weights					
Faceplate LxH	148.3x105.1 mm (5.83x 4.13")	195.2x131.6 mm (7.68x5.18")	264.5x183.1 mm (10.41x7.20")	398.6x248 mm (15.69x 9.76")	534.1x325.6 mm (21.02x 12.81")
Depth D+T+T	16.5 mm (0.06")	16.5 mm (0.06")	16.5 mm (0.06")	26.5 mm (1.04")	26.5 mm (1.04")
Weight	0.5 Kg	0.7 Kg	1.2 Kg	4.0 Kg	6.0 Kg
Approvals					
CE	EN 61000-6-2, EN 61000-6-4, EN 61000-6-1, EN 61000-6-3	EN 62311, EN 61010-1, EN IEC 61010-2-201, EN 61000-6-2, EN 61000-6-4, EN 61000-6-1, EN 61000-6-3, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 300 328	EN 62311, EN 61010-1, EN IEC 61010-2-201, EN 61000-6-2, EN 61000-6-4, EN 61000-6-1, EN 61000-6-3, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 300 328	EN 62311, EN 61010-1, EN IEC 61010-2-201, EN 61000-6-2, EN 61000-6-4, EN 61000-6-1, EN 61000-6-3, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 300 328	EN 62311, EN 61010-1, EN IEC 61010-2-201, EN 61000-6-2, EN 61000-6-4, EN 61000-6-1, EN 61000-6-3, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 300 328
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
RCM	Yes	Yes	Yes	Yes	Yes
Ordering Code	+JS705BA0U5P1	+JS707BB1U5P1	+JS710BC1U5P1	+JS715CD1U5P1	+JS721CE1U5P1

PoE and Support Arm Systems

JSmart
Application Components



	PoE DIN Mounting	PoE Panel Mounting
Features		
PoE Standard	IEEE 802.3af/at	IEEE 802.3af/at
Output Power	36W max	36W max
DC Output Voltage	+54 Vdc	+54 Vdc
Data rates	10/100	10/100
Interface		
Ethernet IN port	10/100	10/100
Ethernet OUT port	10/100 PoE	10/100 PoE
Diagnostic LEDS	3	3
Ratings		
Power Supply	+24 Vdc (18-32 Vdc)	+24 Vdc (18-32 Vdc)
Current Consumption	2.0 A at 24 Vdc (max.)	2.0 A at 24 Vdc (max.)
Efficiency	80% typ	80% typ
Over Voltage / Current Protection	Yes	Yes
Short Circuit Protection	Yes	Yes
Reverse Polarity	Yes	Yes
Environment Conditions		
Operating Temp	-20°C to +55° C	-20°C to +55°C
Storage Temp	-30°C to +80°C	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non-condensing	5-85% RH, non-condensing
Protection Class	IP20 EN60529	IP67 EN60529 front cabinet
Dimensions and Weights		
Faceplate LxH	80x120 mm	80x120 mm
Depth D	28 mm	28 mm
Weight	350 g	350 g
Approvals		
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environment
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
RCM	Yes	Yes
Ordering Code	+JSPOU0P1	+JSPOU0P2



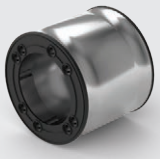
Tube Bracket

Ordering Code: +JSBRU001

Tube Bracket

Ordering Code: +JSBRU002

Wall Bracket



Ordering Code: +JSBRU003

Wall Bracket

Ordering Code: +JSBRU004

Multiuse Bracket

Ordering Code: +JSBRU009

Multiuse Bracket

Ordering Code: +JSBRU010

VESA Bracket

Ordering Code: +JSBRU005

Table Stand

Ordering Code: +JSBRU006

VESA Adapter Bracket

Ordering Code: +JSBRU008

Gooseneck Bracket

Ordering Code: +JSBRU007

90° PoE Cable

Ordering Code: +JSCAU001

Ethernet PoE Cable

Ordering Code: +JSCAU002

PoE USB Cable

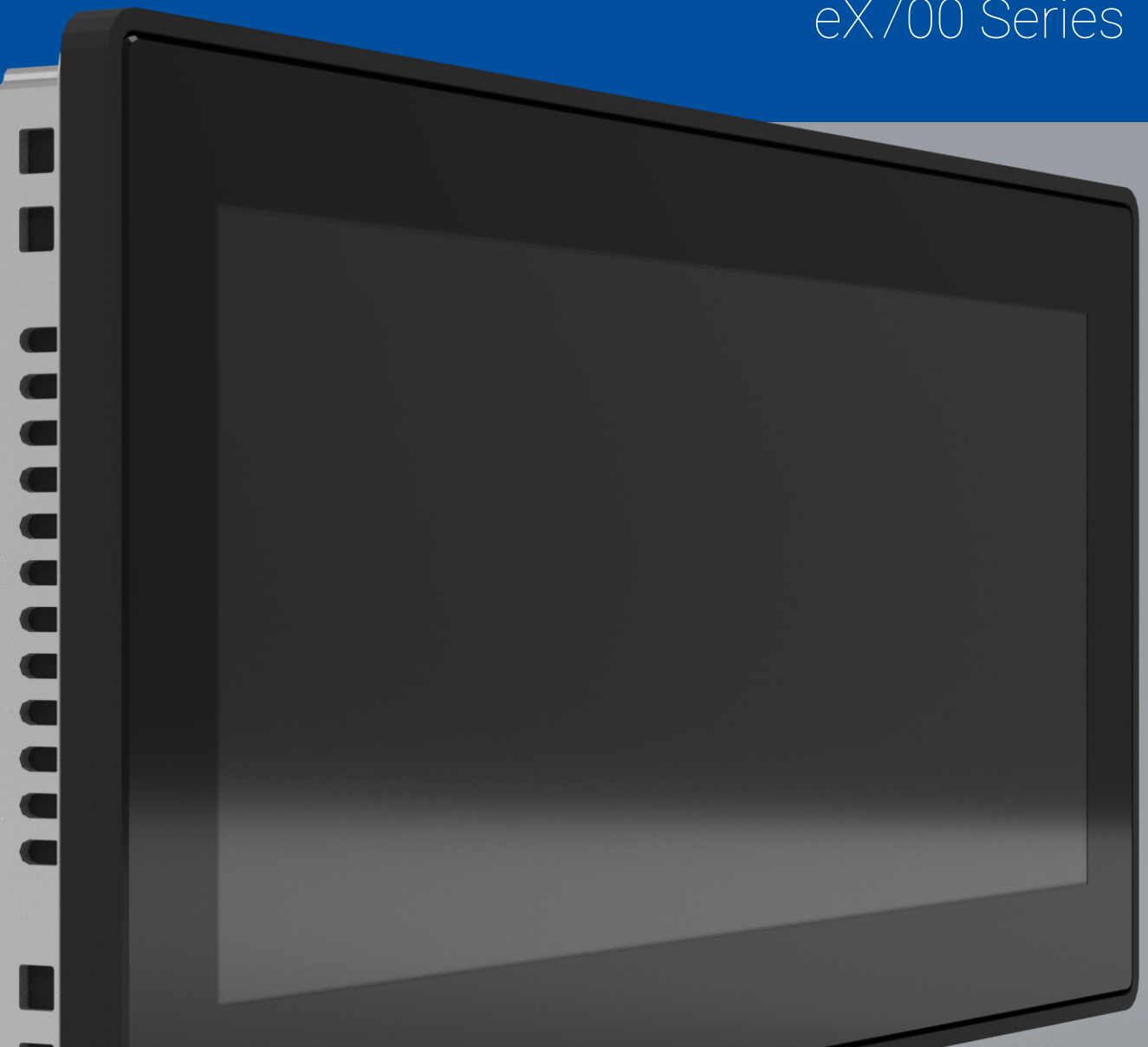
Ordering Code: +JSCAU003

PoE Injector Cable

Ordering Code: +JSBRU004

IoT Controller

eX700 Series



eX712	
System Resources	
Display - Colors	12,3" TFT LED - 16M
Resolution	1920x720, HD
Brightness	600 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
RT-Clock, RTCBack-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	1.1 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) - Type: 12, 4X
Dimensions and Weights	
Faceplate LxH	344.5x163 mm (13.56x6.41")
Cutout AxB	332.5x152 mm (13.09x5.94")
Depth D+T	49+8.5 mm
Weight	1.8 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 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
RCM	Yes
Ordering Code	+EX712U5P1

	eX705	eX707	eX710	eX715	eX721
System Resources					
Display - Colors	5" TFT 16:9 LED - 64K	7" TFT 16:9 LED - 16M	10.1" TFT 16:9 LED - 16M	15,6" TFT LED - 16M	21,5" TFT LED - 16M
Resolution	800x480, WVGA	800x480, WVGA	1280x800, WXGA	1366x768, HD	1920x1080, full HD
Brightness	300 Cd/m² typ.	500 Cd/m² typ.	500 Cd/m² typ.	400 Cd/m² typ.	300 Cd/m² typ.
Dimming	to 0%	to 0%	to 0%	to 0%	to 0%
Touchscreen	PCAP, Multitouch	PCAP, Multitouch	PCAP, Multitouch	PCAP, Multitouch	PCAP, Multitouch
CPU	ARM Cortex-A8 - 1 GHz	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 quad core 800 MHz	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	4 GB	8 GB	8 GB
RAM	512 MB	1 GB	1 GB	2 GB	2 GB
RT-Clock, RTCBack-up, Buzzer	Yes	Yes	Yes	Yes	Yes
Interface					
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	1 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	2 (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.	1 (RS-232, RS-485, RS-422, software configurable). Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable). Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable). Max 3 serial ports using plug-in modules.
SD card	Yes	Yes	Yes	Yes	Yes
Expansion	1 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules
Ratings					
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.6 A at 24 Vdc (max.)	0.7 A at 24 Vdc (max.)	1.0 A at 24 Vdc (max.)	1.2 A at 24 Vdc (max.)	1.7 A at 24 Vdc (max.)
Input Protection	Electronic	Electronic	Electronic	Electronic	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable				
Environment Conditions					
Operating Temperature	-20° to +60 °C (vertical installation). Plug-in modules and USB devices may limit max temperature to +50 °C				
Storage Temp	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) - Type: 12, 4X	IP66 (front), IP20 (rear) - Type: 12, 4X	IP66 (front), IP20 (rear) - Type: 12, 4X	IP66 (front), IP20 (rear) - Type: 12, 4X	IP66 (front), IP20 (rear) - Type: 12, 4X
Dimensions and Weights					
Faceplate LxH	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	422x267 mm (16.6x10.5")	552x347 mm (21,7x13,66")
Cutout AxB	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	411x256 mm (16.18x10")	541x336 mm
Depth D+T	52+8 mm (2.40+0.31")	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.33")	56+8 mm (2.20+0.33")	56+8.5 mm
Weight	1.3 Kg	1.5 Kg	2.5 Kg	4.1 Kg	6.1 Kg
Approvals					
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
IECEx	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	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	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc
DNV-GL, LR, EU RO MR	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes
Ordering Code	+EX705U5P1	+EX707U5P1	+EX710U5P1	+EX715U5P1	+EX721U5P1

Entry level

eSMART Series

	eSMART107B
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
RT-Clock, RTCBack-up, Buzzer	Yes, No, No
Interface	
Ethernet port	1 (port 0 - 10/100/1000)
USB port	1 (Host V2.0, max. 100 mA)
Ratings	
Power supply	24 Vdc (10 to 32 Vdc)
Current Consumption	0.3 A at 24 Vdc (max.)
Input Protection	Electronic
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) Type: 2, 4X
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 industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments
UL	cULus: UL508
DNV-GL	Yes
RCM	Yes
Ordering Code	+ESMA107BU301

	eSMART04	eSMART04M	eSMART07M	eSMART107	eSMART10
System Resources					
Display - Colors	4.3" TFT 16:9 - 64K	4.3" TFT 16:9 - 64K	7" TFT 16:9 - 64K	7" TFT 16:9 - 64K	10.1" TFT 16:9 - 64K
Resolution	480x272	480x272	800x480, WVGA	800x480, WVGA	1024x600, WVGA
Brightness	200 Cd/m^2 typ.	200 Cd/m^2 typ.	200 Cd/m^2 typ.	200 Cd/m^2 typ.	200 Cd/m^2 typ.
Dimming	Yes	Yes	Yes	Yes	Yes
Touchscreen	Resistive	Resistive	Resistive	Resistive	Resistive
CPU	ARM Cortex-A8 - 300 MHz	ARM Cortex-A8 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A9 dual core - 800 MHz	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12	Linux 3.12	Linux 3.12	Linux RT	Linux 3.12
Flash	2 GB	4 GB	4 GB	4 GB	4 GB
RAM	256 MB	512 MB	512 MB	1 GB	512 MB
RT-Clock, RTCBack-up, Buzzer	Yes	Yes	Yes	Yes, Yes, No	Yes
Interface					
Ethernet port	1 (port 0 - 10/100)	1 (port 0 - 10/100)	1 (port 0 - 10/100)	2 (port 0 - 10/100/1000, port 1 - 10/100)	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	2 (Host V2.0, max. 100 mA)	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	2 (RS-232), 2 (RS-422/RS-485 isolated), 2 (CAN 2.0b isolated)	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No	No	No	No	No
Expansion	No	No	No	No	No
Ratings					
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.25 A max. at 24 Vdc	0.25 A max. at 24 Vdc	0.3 A at 24 Vdc (max.)	0.3 A at 24 Vdc (max.)	0.38 A at 24 Vdc (max.)
Input Protection	Automatic	Automatic	Automatic	Automatic	Automatic
Battery	Yes (Supercapacitor)	Yes (Supercapacitor)	Yes (Supercapacitor)	Yes (Supercapacitor)	Yes (Supercapacitor)
Environment Conditions					
Operating Temp	0 to 50 °C (vertical installation)	0 to 50 °C (vertical installation)	0 to 50 °C (vertical installation)	0 to +50°C (vertical installation)	0 to 50 °C (vertical installation)
Storage Temp	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 2, 4X	IP66 (front), IP20 (rear) Type: 2, 4X	IP66 (front), IP20 (rear) Type: 2, 4X	IP66 (front), IP20 (rear) Type: 2, 4X	IP66 (front), IP20 (rear) Type: 2, 4X
Dimensions and Weights					
Faceplate LxH	147x107 mm (5.78x4.21")	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")
Cutout AxB	136x96 mm (5.35x3.78")	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	176x136 mm (6.93x5.35")	271x186 mm (10.66x7.32")
Depth D+T	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")	29+6 mm (1.14+0.23")
Weight	Approx 0.4 Kg	Approx 0.4 Kg	Approx 0.6 Kg	0.875 Kg	Approx 1.0 Kg
Approvals					
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 61000-6-3, Immunity EN 61000-6-1 for residential environments
UL	cULus: UL508	cULus: UL508	cULus: UL508	cULus: UL508	cULus: UL508
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	-	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc	Zone 2: II 3 G Ex ic ec IIC T6 Gc	Zone 2: II 3 G Ex ic ec IIC T6 Gc	-	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes	Yes	Yes	Yes	Yes
EU RO MR	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes
Ordering Code	+ESMA04U301	+ESMA04MU301	+ESMA07MU301	+ESMA107U301	+ESMA10U301

Verticals: Food & Beverage / Pharmaceutical

eX700FB Series

	eX707FB	eX715FB
System Resources		
Display - Colors	7" TFT 16:9 LED - 16M	15,6" TFT LED - 16M
Resolution	800x480, WVGA	1366x768, HD
Brightness	500 Cd/m² typ.	400 Cd/m² typ.
Dimming	to 0%	to 0%
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 quad core 800 MHz
Operating System	Linux RT	Linux RT
Flash	4 GB	8 GB
RAM	1 GB	2 GB
Real-Time-Clock, RTCBack-up, Buzzer	Yes	Yes
Interface		
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes	Yes
Expansion	2 slot for plug in modules	2 slot for plug in modules
Ratings		
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.7 A at 24 Vdc (max.)	1.2 A at 24 Vdc (max.)
Input Protection	Electronic	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable
Environment Conditions		
Operating Temperature	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20°C to +70°C	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP69 (front), IP20 (rear) Type: 12, 4X	IP69 (front), IP20 (rear) Type: 12, 4X
Dimensions and Weights		
Faceplate LxH	217x177 mm (8.54x6.96")	450x295mm
Cutout AxB	176x136 mm (6.93x5.35")	411x256 mm (16.18x10")
Depth D+T	45+10 mm (1.77+0.4")	54+10 mm (2,125+0,394")
Weight	2.5 Kg	5.2 Kg
Approvals		
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
RCM	Yes	Yes
Ordering Code	+EX707U4F1	+EX715U4F1

Verticals: Harsh Environments

eX700G and eTOP500G Series

	eX707G	eX710G	eTOP515G
System Resources			
Display - Colors	7" TFT 16:9 LED - 16M	10.1" TFT 16:9 LED - 16M	15" TFT LED - 64K
Resolution	800x480, WVGA	1280x800, WXGA	1024x768, XGA
Brightness	600 Cd/m² typ.	800 Cd/m² typ.	1500 Cd/m² typ
Dimming	to 0%	to 0%	to 0%
Touchscreen	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive
CPU	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A9 dual core 800 MHz	ARM Cortex-A8 - 1 GHz
Operating System	Linux RT	Linux RT	Microsoft Windows CE 6.0
Flash	4 GB	4 GB	256 MB
RAM	1 GB	1 GB	256 MB
RTClock, RTC Back-up, Buzzer	Yes	Yes	Yes, Yes, Yes
Interface			
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	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.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes	Yes	Yes
Expansion	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules
Ratings			
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.7 A at 24 Vdc (max.)	1.0 A at 24 Vdc (max.)	1.4 A at 24 Vdc (max.)
Input Protection	Electronic	Electronic	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	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	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C	-20 to +60 °C (vertical installation)
Storage Temp	-20°C to +70°C	-20°C to +70°C	-40 to +85 °C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X	IP69K (front), IP20 (rear) Type: 12, 4X
Dimensions and Weights			
Faceplate LxH	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	392x307 mm (15.43x12.08")
Cutout AxB	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	381x296 mm (15x11.65")
Depth D+T	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.33")	56+8.5 mm (2.20+0.33")
Weight	1.5 Kg	2.5 Kg	Approx 4.0 Kg
Approvals			
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 60945, Immunity EN 60945 for marine environments	Emission EN 61000-6-4, Immunity EN 61000-6-2 for industrial environments, Emission EN 60945, Immunity EN 60945 for marine environments	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201	cULus: UL508
UL	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class I Div. 2
IECEx	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	Zone 2/22: Ex nA IIC T5 Gc, Ex tc IIIC T95°C Dc	Zone 2/22: Ex nA IIC T4 Gc -20<Tamb<+60°C, Ex tc IIIC T105°C Dc
ATEX	Zone 2/22: II 3 G Ex nA IIC T5 Gc , II 3 D Ex tc IIIC T95°C Dc	Zone 2/22: II 3 G Ex nA IIC T5 Gc, II 3 D Ex tc IIIC T95°C Dc	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	Yes	Yes
EU RO MR	Yes	-	-
RCM	Yes	Yes	Yes
Ordering Code	+EX707GU5P1	+EX710GU5P1	+ETOP515U5P1

Classic HMI

eTOP500

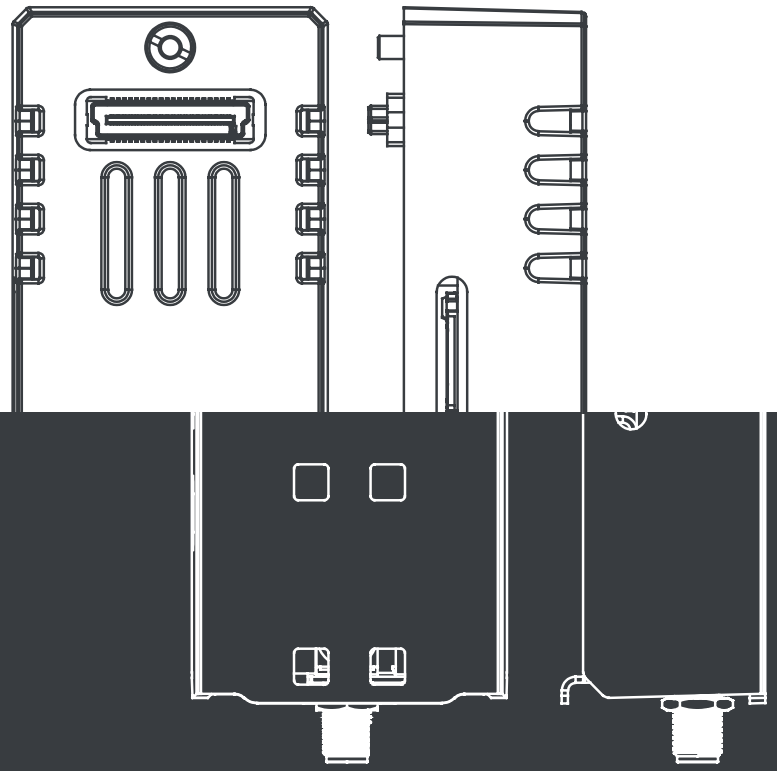
	eTOP504	eTOP506	eTOP507
System Resources			
Display - Colors	4.3" TFT 16:9 LED - 64K	5.7" TFT LED - 64K	7" TFT 16:9 LED - 64K
Resolution	480x272, WQVGA	320x240, QVGA	800x480, WVGA
Brightness	150 Cd/m² typ.	200 Cd/m² typ.	300 Cd/m² typ.
Dimming	to 0%	to 0%	to 0%
Touchscreen	Resistive	Resistive	Resistive
CPU	ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 600 MHz	ARM Cortex-A8 - 600 MHz
Operating System	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0
Flash	128 MB	128 MB	128 MB
RAM	256 MB DDR	256 MB DDR	256 MB DDR
RT Clock, RTC Back-up, Buzzer	Yes, Yes, Yes	Yes, Yes, Yes	Yes, Yes, Yes
Interface			
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch
USB port	1 (port 1 - Host V2.0)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)
SD card	Yes	Yes	Yes
Expansion	1 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules
Ratings			
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.55 A at 24 Vdc (max.)	0.65 A at 24 Vdc (max.)	0.7 A at 24 Vdc (max.)
Input Protection	Automatic	Automatic	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable		
Environment Conditions			
Operating Temp	0 to +50 °C	0 to +50 °C	0 to +50 °C
Storage Temp	-20 to +70 °C	-20 to +70 °C	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X
Dimensions and Weights			
Faceplate LxH	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")	187x147 mm (7.36x5.79")
Cutout AxB	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")	176x136 mm (6.93x5.35")
Depth D+T	56+4 mm (2.40+0.16")	47+4 mm (1.85+0.16")	47+4 mm (1.85+0.16")
Weight	Approx 1.0 Kg	Approx 1.0 Kg	Approx 1.0 Kg
Approvals			
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments		
UL	cULus: UL508	cULus: UL508	cULus: UL508
UL	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class I Div. 2
DNV-GL	Yes	Yes	Yes
RCM	Yes	Yes	Yes
Ordering Code	+ETOP504U1P1 White +ETOP504U2P1 Silver +ETOP504U3P1 Black	+ETOP506U1P1 White +ETOP506U2P1 Silver +ETOP506U3P1 Black	+ETOP507U1P3 White +ETOP507U2P1 Silver +ETOP507U3P1 Black

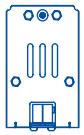
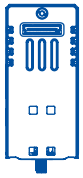
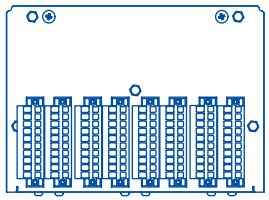
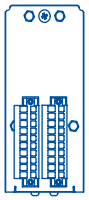
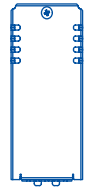




	eTOP507M	eTOP510	eTOP512	eTOP513	eTOP515
System Resources					
Display - Colors	7" TFT 16:9 LED - 64K	10"4 TFT LED - 64K	12"1 TFT LED - 64K	13"3 TFT 16:9 LED - 64K	15" TFT LED - 64K
Resolution	800x480, WVGA	800x600, SVGA	800x600, SVGA	1280x800, WXGA	1024x768, XGA
Brightness	300 Cd/m² typ.	300 Cd/m² typ.	300 Cd/m² typ.	300 Cd/m² typ.	300 Cd/m² typ.
Dimming	to 0%	to 0%	to 0%	to 0%	to 0%
Touchscreen	Resistive	Resistive	Resistive	Resistive	Resistive
CPU	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz	ARM Cortex-A8 - 1 GHz
Operating System	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0	Microsoft Windows CE 6.0
Flash	256 MB	256 MB	256 MB	256 MB	256 MB
RAM	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR	256 MB DDR
RT Clock, RTC Back-up, Buzzer	Yes, Yes, Yes	Yes, Yes, Yes	Yes, Yes, Yes	Yes, Yes, Yes	Yes, Yes, Yes
Interface					
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	2 (port 0 - 10/100, port 1 - 10/100) with integrated Switch	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)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)	2 (port 1 - Host V2.0, port 2 - Host V2.0/1.1)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)
SD card	Yes	Yes	Yes	Yes	Yes
Expansion	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules	2 slot for plug in modules
Ratings					
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.7 A at 24 Vdc (max.)	1 A at 24 Vdc (max.)	1.05 A at 24 Vdc (max.)	1.15 A at 24 Vdc (max.)	1.25 A at 24 Vdc (max.)
Input Protection	Automatic	Automatic	Automatic	Automatic	Automatic
Battery	Rechargeable Lithium battery, not user-replaceable				
Environment Conditions					
Operating Temp	0 to +50 °C	0 to +50 °C	0 to +50 °C	0 to +50 °C	0 to +50 °C
Storage Temp	-20 to +70 °C	-20 to +70 °C	-20 to +70 °C	-20 to +70 °C	-20 to +70 °C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X	IP66 (front), IP20 (rear) Type: 12, 4X
Dimensions and Weights					
Faceplate LxH	187x147 mm (7.36x5.79")	287x232 mm (11.3x9.13")	336x267 mm (13.22x10.51")	336x267 mm (13.22x10.51")	392x307 mm (15.43x12.08")
Cutout AxB	176x136 mm (6.93x5.35")	276x221 mm (10.86x8.70")	326x256 mm (12.83x10.07")	326x256 mm (12.83x10.07")	381x296 mm (15x11.65")
Depth D+T	47+4 mm (1.85+0.16")	56+4 mm (2.20+0.16")	56+4 mm (2.20+0.16")	56+4 mm (2.20+0.16")	60+4 mm (2.36+0.16")
Weight	Approx 1.0 Kg	Approx. 2.1 Kg	Approx. 2.8 Kg	Approx. 2.8 Kg	Approx 3.5 Kg
Approvals					
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments				
UL	cULus: UL508	cULus: UL508	cULus: UL508	cULus: UL508	cULus: UL508
UL	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class I Div. 2
DNV-GL	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes
Ordering Code	+ETOP507MU1P1 White +ETOP507MU2P1 Silver +ETOP507MU3P1 Black	+ETOP510U1P1 White +ETOP510U2P1 Silver +ETOP510U3P1 Black	+ETOP512U1P1 White +ETOP512U2P1 Silver +ETOP512U3P1 Black	+ETOP513U1P1 White +ETOP513U2P1 Silver +ETOP513U3P1 Black	+ETOP515U1P1 White +ETOP515U2P1 Silver +ETOP515U3P1 Black

Accessories Plug-Ins



Model	Part Number	Description	Compatible with
PLCM01	+PLCM01U0P1	Plug-in CAN	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLCM02	+PLCM02U001	Plug-in KNX/EIB (TP interface)	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLCM03	+PLCM03U0P1	Plug-in RS-232	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLCM04	+PLCM04U0P1	Plug-in RS-422/485 with optical insulation	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLCM05	+PLCM05U0P2	Plug-in extender (for use with PLIO03/04)	eTOP504, eX705, eXware703, eTOP605
PLCM06	+PLCM06U0P1	Plug-in Profibus DP slave 12 MB	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLCM07	+PLCM07U0P1	Plug-in Secure Cloud Connector	eTOP500, eTOP500G, eTOP500FB Series
PLCM09	+PLCM09U0P1	Plug-in Wireless Modem	eX700, eX700G, eX700FB, eXware Series
CODESYS V3 SoftPLC	+SWLC00R000000	CODESYS V3 activation license	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware, JSmart, eSMART Series
PLCM01-CDS	+PLCM01U0P2	Plug-in CAN + CODESYS V2	eTOP500, eTOP500G, eTOP500FB Series
PLCM02-CDS	+PLCM02U002	Plug-in KNX/EIB (TP interface) + CODESYS V2	eTOP500, eTOP500G, eTOP500FB Series
PLCM05-CDS	+PLCM05U0P1	Plug-in extender + CODESYS V2	eTOP500, eTOP500G, eTOP500FB Series
PLIO03	+PLIO03U0P1	Plug-in I/O 20 DI 24 VDC, 12 DO 24 VDC 0,5 A, 8 AI (4 diff or 8 single or 4 PT100 or 4 TC), 4 AO, 1 PT100 Cold Junct	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLIO04	+PLIO04U0P1	Plug-in I/O 10 DI 24 VDC, 10 DO SSR 1.4 A, 4 Programmable AI voltage/PT100/TC, 4 AI voltage, 1 PT100	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLIO06	+PLIO06U0P1	Plug-in I/O compact 8 DI, 6 DO, 1 Relay Output	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series
PLIO07	+PLIO07U001	Plug-in I/O compact 2 Relay Outputs	eTOP500, eTOP500G, eTOP500FB, eX700, eX700FB, eX700G, eXware Series

Handheld Series

BY EXOR INTERNATIONAL

What is the relationship between 0n3 and EXOR?

0N3 is a 100% wholly owned subsidiary of EXOR International. EXOR International is licensed to develop and produce mobile devices based on the design and IP of 0N3. 0N3 is the specialised sales unit of EXOR International for all such applications.

History in handheld devices

Since 2012, 0n3 has been designing handheld devices. With the market's attention on wireless industrial communications, 0N3 has developed a unique Wi-Fi based safety coupling and is already working in the 5G lab of EXOR on the next generation of handheld or wearable devices.

X5

System Resources	
Display - Colors	5" TFT LED - 64K colors
Resolution	480x272
Brightness	300 Cd/m² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	i.MX6UL ARM Cortex A7 - 528 MHz
Operating System	Linux 4.14
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up	Yes, rechargeable Lithium battery (not user-replaceable)
Handwheel	Yes
Potentiometer	2
Selector Rotary Switch	16 positions
Emergency Stop Button	Yes, illuminated
Enabling Button	3 positions
Status Indicators	2 bi-color LED
Keys	19 user-programmable
Sensors	3-axis Accelerometer, Temperature (internal)
Buzzer, Vibrator	Yes
Interface	
Wireless	IEEE Std 802.11a/b/g/n
USB	2 Host V2.0, 250mA max
NFC	Yes (optional)
Ratings	
Power Supply	Rechargeable Battery
Battery capacity	4400 mAh
Charging Station	Yes
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	
Certifications*	CE (Radio Equipment Directive 2014/53/UE for installation in industrial environments), FCC
Safety*	IEC 61508, EN ISO 13849-1, EN 61010-1 / EN 61010-2-201, UL61010-1 / UL61010-2-201
Safety functions*	SIL (IEC 61508): Emergency Stop SIL3, Enabling Device SIL 3, Selector SIL 1 - Performance Level (EN ISO 13849-1): Emergency Stop PL=d, Cat.3, Enabling Device PL=d, Cat.3, Selector PL=b, Cat.B

Part Number	Description
10100390YE-0001	HMI X5 0N3 WIRELESS JM
10100390YE-0000	0N3 BASE STATION X5
10100390YE-0002	RECHARGING STATION

* In progress



H3

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 industrial environments
UL	cULus: UL508 (only +EP3H3REJ2H0YE2, +EP3H3REJ4H0YE2)
RCM	Yes

Part Number	Description
10100070YE-0002	H3 0n3 Wired 10 M Ethernet JM
10100070YE-0007	H3 0n3 Wired 20 M Ethernet JM
10100070YE-0003	H3 0n3 Wired 10 M Eth + Handwheel JM
10100070YE-0008	H3 0n3 Wired 20 M Eth + Handwheel JM
10100070YE-0010	H3 0n3 Wired 10 M Serial JM
10100070YE-0011	H3 0n3 Wired 10 M Serial + Handwheel JM
10100070YE-0004	H3 0n3 10 M Eth + Handwheel Circular Connector JM - UL Approval
10100070YE-0009	H3 0n3 20 M Eth + Handwheel Circular Connector JM - UL Approval
10500070YA-0002	Connection Box H3 Circular Connector - UL Approval
10500070YA-0000	Standby Station H3 - Holder For H3



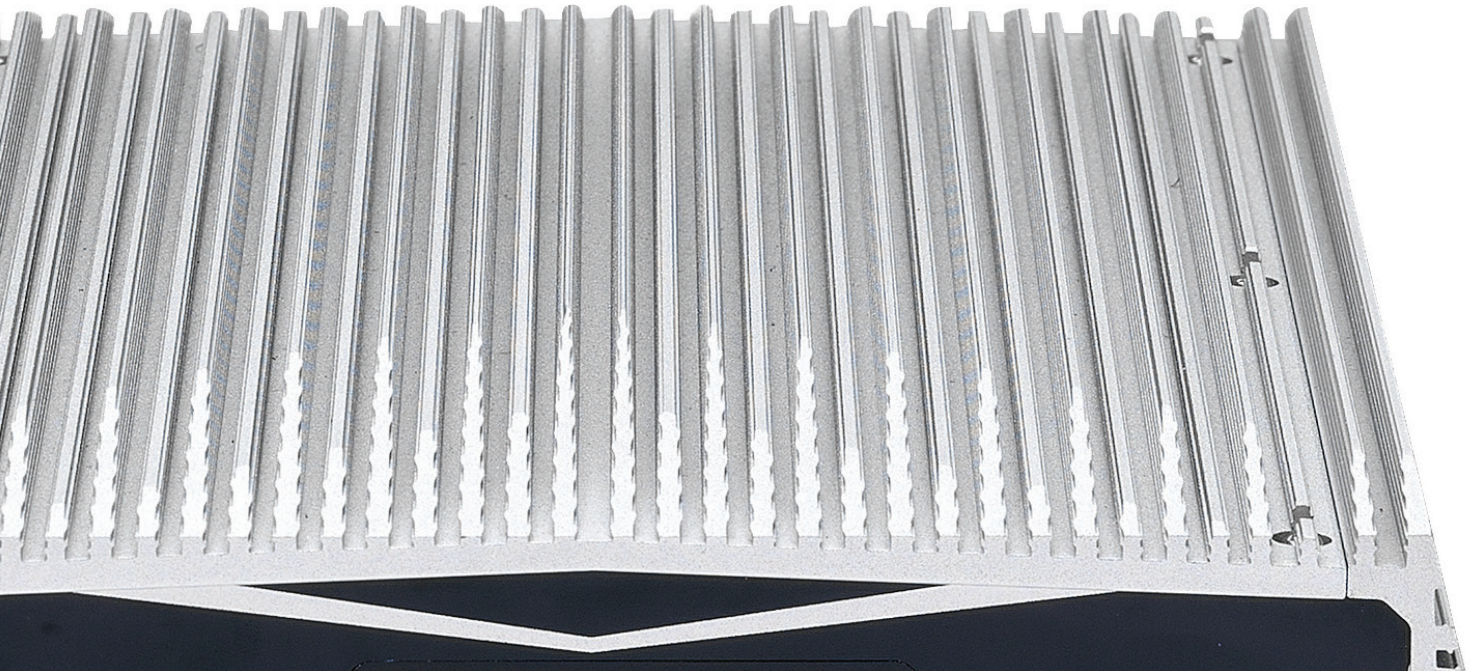
H4

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
UL	cULus: UL508

Part Number	Description
10100080YE-0000	HMI H4 0N3 WIRELESS JM
10500080YA-0000	ANTENNA + COUPLING TOKEN
10200080YA-0000	RECHARGING STATION H4
10200080YA-0001	CIS H4

Industrial PC

eCC- EPC- IPC- MON- Series



	eCC105U
CPU	Intel® Celeron® J1900 2.0GHz
Chipset	Intel® Bay Trail-D
Max. Memory	8GB DDR3L
HDD Space	1 x 2.5"" SATA 2.0 HDD bay
CFast Socket	-
eMMC	-
VGA	-
LVDS	-
DVI	1 (DVI-I)
HDMI	1
DisplayPort	-
USB	2 x USB 2.0, 1 x USB 3.0"
Serial Port	4
RS422/485	2
RS422/485 Isolation	-
mini-PCIe	1
M.2	1
SIM Card Holder	1
GPIO	4-in/4-out (Internal)
LAN Ports	2x GbE
Audio	Mic-in & Line-out
Power Input Range	ATX, DC + 9V ~ 30VDC
Power Supply Adapter	Optional
Expansion	-
Win7 32-bit	V
Win7 64-bit	V
WES2009 32-bit	-
Win8 32-bit	-
Win8 64-bit	-
WinCE/WEC	-
Win10 32-bit	-
Win10 64-bit	V
System Dimension (WxDxH) (mm)	185 x 131 x 54
Carton Dimension (WxDxH) (mm)	318 x 245 x 152
Net Weight (kg)	1.3
Gross weight (kg)	2
Ordering Code	+70ECC105U






	eCC51	eCC106	eCC107	eCC108	eCC3800E	eCC3800E-H110
CPU	Intel® Celeron® N3350/J3455	Intel® Pentium® N3710 1.6GHz	Intel Atom® E3930 1.30 GHz	Intel® Celeron® J3455 1.50GHz	6th Gen Intel® Core™ i7/i5/i3 LGA socket	6th Gen Intel® Core™ i7/i5/i3 LGA socket
Chipset	Intel® Apollo Lake	Intel® Braswell	Intel® Apollo Lake	Intel® Apollo Lake	Q170 PCH	H110 PCH
Max. Memory	8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	16GB DDR4	16GB DDR4
HDD Space	-	1 x 2.5"" SATA HDD bay	1 x 2.5"" SATA 2.0 HDD bay	1 x 2.5"" SATA 2.0 HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
CFast Socket	-	1 (External, CFast)	-	-	1 (External, M.2)	-
eMMC	16GB	-	-	-	-	-
VGA	-	-	-	-	-	-
LVDS	-	-	-	Dual, 48-bit (Internal)	-	-
DVI	-	1 (DVI-D)	1 (DVI-D)	-	1 (DVI-D)	1 (DVI-D)
HDMI	-	1	-	-	1	1
DisplayPort	1	1	1	2	1	-
USB	2 x USB 3.0, 2 x USB 2.0"	4 x USB 3.0	4 x USB 3.0	2 x USB 2.0, 2 x USB 3.0	4 x USB 2.0, 4 x USB 3.0	4 x USB 3.0, 2 x USB 2.0
Serial Port	3	4	2	3	2	2
RS422/485	1	2	2	1	2	2
RS422/485 Isolation	-	-	-	-	2	r
mini-PCIe	1	1	1	1	2	2
M.2	2	-	1 (External)	1	1	1
SIM Card Holder	1	1	1	-	1	1
GPIO	4-in/4-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)	8-in/8-out (Internal)	4-in/4-out (Internal)	4-in/4-out (Internal)
LAN Ports	2 x GbE	2 x GbE	2x GbE	2 x GbE	3 x GbE	2 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	-	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC +12V/+24V	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC	ATX,DC + 24V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional	Optional
Expansion	-	-	-	-	1 x PCIe x4	1 x PCIe x4
Win7 32-bit	-	-	-	-	V	V
Win7 64-bit	-	V	-	-	V	V
WES2009 32-bit	-	-	-	-	-	-
Win8 32-bit	-	-	-	-	-	-
Win8 64-bit	-	V	-	-	V	V
WinCE/WEC	-	-	-	-	V	V
Win10 32-bit	-	-	-	-	-	-
Win10 64-bit	V	V	V	V	V	V
System Dimension (WxDxH) (mm)	162 x 150 x 26	185 x 131 x 54	185 x 131 x 54	185 x 131 x 54	215 x 272 x 93	215 x 272 x 93
Carton Dimension (WxDxH) (mm)	233x 227 x 169	318 x 245 x 152	318 x 245 x 152	318 x 245 x 167	378 x 342 x 269	378 x 342 x 269
Net Weight (kg)	0.87	1.3	1.3	1.3	4.5	4.5
Gross weight (kg)	2	2	2	2	5.9	5.9
Ordering Code	+70ECC51	+70ECC106	+70ECC107	+70ECC108	+70ECC3800E	+70ECC3800EH110

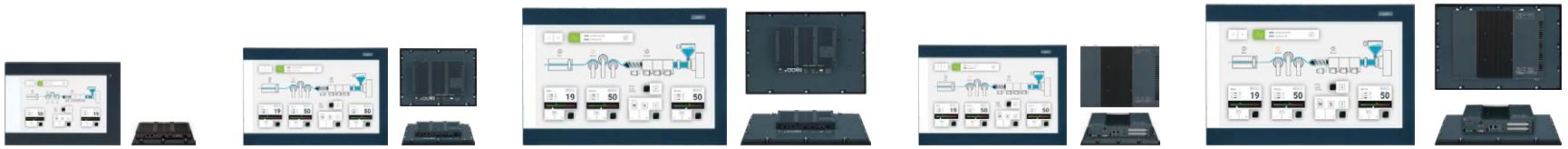



	eCCF104M	eCCF105	eCCF200	eCCF300
CPU	Intel® Celeron® J1900 2.0GHz	Intel Atom® x5-E3930 1.8GHz	Intel® Celeron® J1900 2.0GHz	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)
Chipset	Intel® Bay Trail-D	Intel® Apollo Lake-I	Intel® Bay Trail-D	Intel® Q170
Max. Memory	Onboard 4GB DDR3L	Onboard 4GB DDR3L	8GB DDR3L	8GB DDR4
TPM	TPM 2.0 (SLB9665)	-	-	-
NVRAM	-	-	-	-
Storage	1 x mSATA	Onboard eMMC 16GB	1 x 2.5"" SATA HDD bay	2 x 2.5"" SATA HDD bay
CFast Socket	-	-	-	1 (external, CFast)
SD Card	-	1	1	-
DVI	-	-	1 (DVI-I)	1 (DVI-D)
HDMI	1	1	-	1
DisplayPort	-	-	1	-
USB	1 x USB 2.0, 1 x USB 3.0, 1 x USB 2.0 (internal)	4 x USB 3.0	3 x USB 2.0, 1 x USB 3.0	2 x USB2.0, 4 x USB3.0
Serial Port	1	2	2	2
RS422/485	1 (RS232/RS485)	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
RS422/485 Isolation	1 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
mini-PCIe	1 x Full for mSATA 1 x Half for USB/PCIe module	2 x Full size	2	2
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (external)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Port	2 x GbE (Intel® I211)	2 x GbE (Intel® I210-IT)	2 x GbE	3 x GbE
Audio	-	-	Line-out (internal)	Mic-in & Line-out
Fieldbus I/O Support	-	-	1 (optional)	1 (optional)
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Win7 32-bit	V	-	V	V
Win7 64-bit	V	-	V	V
WinCE/WEC	-	-	V	-
Win10 32-bit	V	V	V	V
Win10 64-bit	V	V	V	V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	-	-	-	-
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 50˚C	-5°C to 55˚C	-5°C to 55˚C	-5°C to 55˚C
System Dimension (W x D x H, mm)	56.5 x 100 x 130	46.2 x 100 x 120	85 x 157 x 214	90 x 185 x 251
Carton Dimension (W x D x H, mm)	223 x 191 x 206	223 x 191 x 206	346 x 265 x 200	389 x 329 x 251
Net Weight (kg)	0.6	0.7	2.3	3.5
Gross Weight (kg)	1.5	1.6	3.3	4.9
Net Weight (kg)	2.3	3.6	4.7	5.6
Ordering Code	+70ECCF104M	+70ECCF105	+70ECCF200	+70ECCF300





	eTOP-EPC0840T	eTOP-EPC1245T	eTOP-EPC1540T	eTOP-EPC1740T	eTOP-EPC1940T
LCD Size	8.0" 4:3	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max Resolution	SVGA, 800 x 600	XGA, 1024 x 768	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminace (cd/m2)	400	500	400	350	350
Contrast Ratio	500	700	2500	800	1000
LCD Color	262K	16.7M	16.7M	16.7M	16.7M
Viewing Angel (H-V)	50(U), 70(D), 70l(L), 70(R)"	70(U), 70(D), 80(L), 80(R)"	88(U), 88(D), 88(L), 88(R)	60(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED	LED	LED
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	82%	80%	81%	81%	81%
CPU	Intel Atom® Processor E3826 Dual Core 1.46GHz	Intel® Celeron® J1900 Quad Core up to 2.0GHz	Intel Celeron J1900 Quad Core up to 2.0GHz	Intel Celeron J1900 Quad Core up to 2.0GHz	Intel Celeron J1900 Quad Core up to 2.0GHz
OS	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10
Memory	2GB DDR3L SO-DIMM module	4GB DDR3L, SO-DIMM module	4GB DDR3L, SO-DIMM module	4GB DDR3L, SO-DIMM module	4GB DDR3L, SO-DIMM module
CFast Socket	1	1	1	1	1
2nd Display Output	VGA	VGA	VGA	VGA	VGA
Ethernet (10/100/1000)	2	2	2	2	2
Line-out	Line out	Line out	Line out	Line out	Line out
USB 2.0/3.0	3/1	2/1	2/1	2/1	2/1
COM Port	2 x RS232/422/485	Isolation 2 x RS232/422/485"	Isolation 2 x RS232/422/485"	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485
Power Switch	1	1	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin	2-pin	2-pin
Reset Button	1	1	1	1	1
Power Jack	DC 4-pin DIN Power Jack with shield	Terminal blocks 3-pin phoenix con-nector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	1 x Mini PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel
Mounting	Panel/Wall/Stand/VESA 100 x 100 mm	Panel/Wall/Stand/VESA 100 x 100 mm	Panel/Wall/Stand/VESA 100 x 100 mm	Panel/Wall/Stand/VESA 100 x 100 mm	Panel/Wall/Stand/VESA 100 x 100 mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C	0˚C to 50˚C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20˚C to 75˚C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65
Certification	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A
Cut Out Size (W x H) (mm)	209.6 x 176.1	304.5 x 230	371 x 297	399 x 329	436 x 366
Dimension (W x H x D) (mm)	217.4 x 176.4 x 68.9	317 x 243 x 65.5	384.3 x 309.9 x 63.2	410.4 x 340.4 x 65.9	457.6 x 379.2 x 61.2
Net Weight (kg)	2.3	3.6	4.7	5.6	6.3
Ordering Code	+71EPC0840T	+71EPC1245TJ	+71EPC1540TJ	+71EPC1740TJ	+71EPC1940TJ



	eTOP-IPC1040P	eTOP-IPC1640P	eTOP-IPC2140P	eTOP-IPC1670P	eTOP-IPC2170P
LCD Size	10.1" 16:9	15.6" 16:9	21.5" 16:9	15.6" 16:9	21.5" 16:9
Max. Resolution	WXGA 1280 x 800	HD, 1366x768	Full HD, 1920 x 1080	HD, 1366x768	Full HD, 1920 x 1080
Luminance (cd/m2)	300	400	300	400	300
Contrast Ratio	1300	500	5000	500	5000
Viewing Angle (H-V)	85(U), 85(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED	LED	LED	LED
LCD Color	262K	16.7M	16.7M	16.7M	16.7M
Touch Screen	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap
Touch Light Transmission	87%	87%	87%	87%	87%
CPU	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket
Chipset	-	-	-	Intel® Q87	Intel® Q87
OS	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10
Memory	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L
CFast Socket	1	1	1	1	1
2nd Display Output	VGA	VGA	VGA	DVI-I+DP	DVI-I+DP
PS2 KB/MS	-	-	-	1	1
Ethernet (10/100/1000)	2	2	2	2	2
Line-out	Line-out	Line-out	Line-out	Line-out	Line-out
Line-in	-	-	-	Line-in	Line-in
Mic-in	-	-	-	MIC-in	MIC-in
USB 2.0/3.0	2/1	2/1	2/1	-/4	-/4
COM Port	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin	3-pin	3-pin
Reset Button	1	1	1	1	1
Power Jack	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe/ 2xPCI or PCIe slots	2 x mini-PCIe/ 2xPCI or PCIe slots
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional
Operating Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 50°C	-10°C to 50°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	294 x 209	398 x 293	544 x 364	398 x 293	544 x 364
Dimension (W x H x D, mm)	308 x 223 x 60.7	417.4 x 312.4 x 63.75	562.4 x 382.4 x 62.85	417.4 x 312.4 x 105.95	562.4 x 382.4 x 105.05
Net Weight (kg)	3.7	6.4	9.26	9.18	11.7
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A
Ordering Code	+72IPC1040P	+72IPC1640P	+72IPC2140P	+72IPC1670P	+72IPC2170P





	eTOP-IPC1680P	eTOP-IPC2180P	eTOP-IPC1570T	eTOP-IPC1770T	eTOP-IPC1970T
LCD Size	15.6" 16:9	21.5" 16:9	15" 4:3	17" 4:3	19" 4:3
Max. Resolution	HD, 1366x768	Full HD, 1920 x 1080	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m2)	300	250	450	350	350
Contrast Ratio	500	5000	800	1000	1000
Viewing Angle (H-V)	16.7M	16.7M	70(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)	LED	LED	LED
LCD Color	LED	LED	16.2M	16.7M	16.7M
Touch Screen	Ten Point P-Cap	Ten Point P-Cap	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	87%	87%	81%	81%	80%
CPU	6th Gen Intel® Core™ i5/i3 BGA	6th Gen Intel® Core™ i5/i3 BGA	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket
Chipset	-	-	Intel® Q87	Intel® Q87	Intel® Q87
OS	Win10	Win10	Win7, Win10	Win7, Win10	Win7, Win10
Memory	Max. 32GB DDR3L	Max. 32GB DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L
CFast Socket	-	-	1	1	1
2nd Display Output	2 x DP	2 x DP	DVI-I+DP	DVI-I+DP	DVI-I+DP
GPI/O	1 x DB15 (4xGPI/4xGPO)	1 x DB15 (4xGPI/4xGPO)	1 (4xGPI/4xGPO) Internal	1 (4xGPI/4xGPO) Internal	1 (4xGPI/4xGPO) Internal
Ethernet (10/100/1000)	2	2	2	2	2
Line-out	-	-	Line-out	Line-out	Line-out
Line-in	-	-	Line-in	Line in	Line-in
Mic-in	-	-	MIC-in	MIC-in	MIC-in
USB 2.0/3.0	2/2	2/2	1 (1 in front)/4	1 (1 in front)/4	1 (1 in front)/4
COM Port	2xRS232; 1xRS232/422/485	2xRS232; 1xRS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1	1	1
Remote Power Switch	3pin	3pin	3-pin	3-pin	3-pin
Reset Button	1	1	1	1	1
Power Jack	Terminal Blocks 3-Pin Phoenix Connector	Terminal Blocks 3-Pin Phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix connector
Expansion	1xMini PCIe	1xMini PCIe	"2 x mini-PCIe/2 x PCI or PCIe slots	"2 x mini-PCIe/2 x PCI or PCIe slots	2 x mini-PCIe/ 2xPCI or PCIe slots
Construction Front Panel	Aluminum Front Zero Bezel	Aluminum Front Zero Bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/Wall/Stand/VESA 100x100mm	Panel/Wall/Stand/VESA 100x100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+24V DC	+24V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional
Operating Temp.	0°C to 50°C	0°C to 50°C	-20°C to 50°C	-10°C to 50°C	-10°C to 50°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10%~90%, Non-condensing	10%~90%, Non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front Frame IP66	Front Frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	398x293mm	544x364mm	382 x 312	434.4 x 358.9	452 x 382
Dimension (W x H x D, mm)	417.4x312.4x81.75mm	562.4x382.4x80.35mm	400 x 330 x 104.9	451 x 375.5 x 105	470 x 400 x 104.9
Net Weight (kg)	6.4	9.26	8.3	9.5	10.3
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A
Ordering Code	+72IPC1680P	+72IPC2180P	+72IPC1570T	+72IPC1770T	+72IPC1970T






	MON1205T	MON1500T1	MON1700T1	MON1900T1
LCD Size	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max. Resolution	XGA, 1024 x 768	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m2)	500	400	350	350
Contrast Ratio	700	2500	800	1000
Viewing Angle (H-V)	70(U), 70(D), 80(L), 80(R)	88(U), 88(D), 88(L), 88(R)	60(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	80%	81%	81%	81%
Touch Screen I/F	USB	USB	USB	USB
OSD Function	OSD keypad	OSD keypad	OSD keypad	OSD keypad
Video Input	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel
Mounting	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm
Power Input	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65
Cut Out Size (W x H, mm)	304.5 x 230	371 x 297	399 x 329	436 x 366
Dimension (W x H x D, mm)	317 x 243 x 53.5	384.37 x 309.95 x 51	410.4 x 340.4 x 53.9	457.64 x 379.24 x 49.15
Net Weight (kg)	2.8	3.9	4.8	5.5
Certifications	CE; FCC Class B	CE; FCC Class B	CE; FCC Class B	CE; FCC Class B
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65
Certification	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A
Ordering Code	+73MON1205T1	+73MON1500T1	+73MON1700T1	+73MON1900T1

	MON1600P	MON2100P
LCD Size	15.6" 16:9	21.5" 16:9
Max. Resolution	HD, 1366 x 768	Full HD, 1920 x 1080
Panel	AUO: G156XW01 V1	AUO: G215HVN01.0
Luminance (cd/m2)	400	300
Contrast Ratio	500	5000
Viewing Angle (H-V)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED
LCD Color	16.7M	16.7M
Touch Screen	10 x point P-Cap	10 x point P-Cap
Touch Light Transmission	87%	87%
Touch Screen I/F	USB	USB
OSD Function	OSD keypad	OSD keypad
Video Input	VGA; DVI-D; DP	VGA; DVI-D; DP
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 24V DC	+12 to 24V DC
Power Supply Adapter	Optional	Optional
Operating Temp.	-10°C to 60°C	-10°C to 60°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	398 x 293	544 x 364
Dimension (WxHxD, mm)	417.4 x 312.4 x 51.75	562.4 x 382.4 x 50.85
Net Weight (kg)	5.48	7.87
Certifications	CE; FCC Class B	CE; FCC Class B
Ordering Code	+73MON1600P	+73MON2100P