SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

Product Guide

EXOR

The X Platform

Today's needs

Tomorrow's wants

Purchase Criteria

Future Ideas

Your Objective, 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. Industry 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 Industry 4.0 Solution to Your Business Objective.

That's why EXOR International is a technology provider.

X PLATFORM

In the sophisticated world of industrial automation, the march of progress is constant and unassuming. It's a world where machine builders and factory owners seek not just equipment, but comprehensive solutions - a reliable, silent partner in their quest for operational excellence.

Enter the X Platform, a quietly confident presence ready to **bridge the gap between the complex aspirations of machine builders and the practical necessities of factory operations.**

TODAY'S NEEDS

Remote Access VPN

Connect seamlessly to devices regardless of their location

Unlock the potential of remote access and VPN solutions designed exclusively for industrial machine builders and factory owners. seamlessly and securely connect to your devices and machines, no matter where they are located. Read more on our website.

Industrial Fleet Management

Seamless Management for Every Machine in Your Fleet

Empower, monitor, and update globally with a click. Introducing the power of the X Platform's Fleet Management app - a complete technology designed to oversee your machine fleet throughout its lifecycle. Read more on our website.

Advanced Documentation

Empower Operations with Instant Documentation Access

From digital clarity to analog precision - all in one place. Harness the potential of the X Platform's Advanced Documentation function, bridging the digital and analogue realms effortlessly. Read more on our website.

HMI and IPC Integration

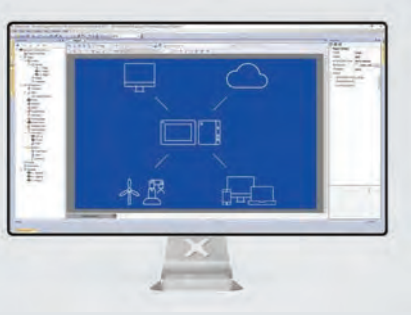
Effortless interfaces for optimal control.

From the very basic component of IIoT, at the SOM level, through field and then up to SCADA and master level panels, EXOR covers all the current and future market needs.

Edge Visualization

Revolutionary Software for Industrial Edge Visualization

With JMobile's user-friendly software suite, you can seamlessly manage connectivity from edge to cloud, device operations, process management, and data visualization. This comprehensive solution is essential for all levels of edge to cloud integration in any Industrial IoT platform architecture.



Protocols

Transforming Operations with Enhanced Data Sharing

EXOR products enable seamless communication between your machines, regardless of their age or complexity. Our devices are equipped with communication drivers for all major brands of controllers, allowing for easy routing and exchange of key data with the systems in your facility.

Soft PLC

XPLC: Innovative IEC 61131-3 development ecosystem

XPLC is a development environment full compliant with the IEC 61131-3 standard, the most common standard for programming industrial controllers. Read more on our website.

Embedded

The First Component of Industrial IoT

Embedded department concentrates in Embedded Computer Systems based on ARM architecture which are used in many different professional environments. .

SOFTWARE

JMobile®

Operational Technology Software

JMobile: 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 all the edge to cloud levels in **any Industrial IoT platform architecture**. JMobile is a distinguished software suite in the industrial sector, offering robust communication solutions for the Industrial Internet of Things (IIoT). This software is designed to facilitate **seamless interaction between industrial machines and digital platforms**, encompassing a range of functionalities **from edge to cloud connectivity**, device management, process management, and data visualization.

- High User Interface Experience
- Create IIoT ecosystems with reduced risk
- Real Interoperability
- Great HTML5 interface with JM4Web
- Create Alarms with associated Alerts
- Efficient scripting with JavaScript
- Option for external SQL Database Access, as IT-OT Joiner
- 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 6 languages: English, German, French, Korean, Traditional and Simplified Chinese
- Multi platform runtime: Linux, Windows
- Full compatibility with OPC UA

JMobile®

Overview

For connectivity, with a fully integrated CODESYS PLC, JMobile permits communication to all I/O, Sensors, Motion devices via the significant protocols of PROFINET, EtherCAT, CANopen, EtherNet/IP, Modbus amongst many others. Transmitted using the highly robust and secure OPC UA standard, **data is seamlessly 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, **JM4Web**. This provides users with advanced control and remote supervision from any browser, any device (smartphone, tablet, or computer).

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.

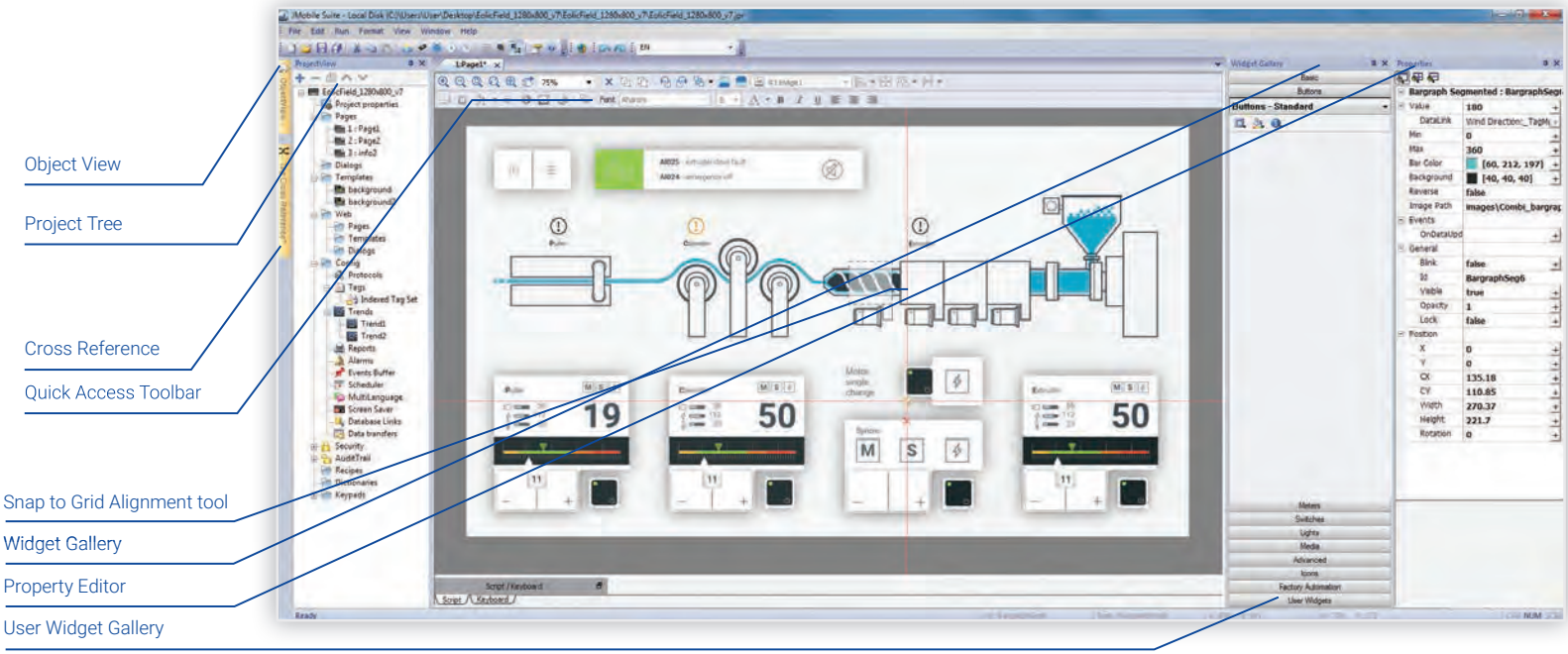
Latest Improvements

New Features:

- Fully redesigned Widget Gallery with search functionality
- Security and protection of intellectual property with project encryption and sign
- New dashboard pages for responsive design
- New watch window in JMobile Simulator
- Native support for connecting SQL Databases (MySQL, MariaDB, PostgreSQL, ODBC)
- New Tab/Toolbar widget with gestures
- New Stack widget to manage many layers on Z axis at design time and in runtime
- New QR code widget to load a specific page or URL

Improvements, usability and productivity:

- Browser widget with new technology engine
- TLS support for sending emails
- Trends Autofill, Import/Export, Copy/Paste to maximize productivity
- Indexed Tag Sets Import/Export and Copy/Paste to maximize productivity
- Possibility to attach client variable to index of Indexed Tags Sets to support session-based instances
- Pick any color from screen to maximize design power
- Added custom selectors in table and grid based widget for better suggestion on how to use them
- Alphanumeric fields with custom language-based keypads
- Improved way to import certificates in OPC UA Client protocol
- Added validation controls on OPC UA Client protocol
- Added TCP mode to CODESYS V3 ETH protocol



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 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

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

CORVINA 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. It is easier than ever to create screens optimized for visualization on any client while saving programming time.

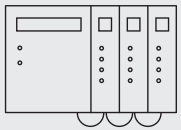
JMobile project validation technology makes it simpler creating fully operational applications under all conditions.

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 you will find a great 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.

PDF



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.

JMobile includes support for the most common protocols for PLCs like Siemens, Rockwell, Omron, Beckhoff and many others. Open protocols for direct CAN, serial and TCP/UDP communication are includes as well.

Pure Web Technology

JM4Web 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.

IOT PLATFORM

CORVINA®


ADVANCED DOCS
EDGE SECURITY
EDGE VISUALIZATION
EMBEDDED
FLEET MANAGEMENT
REMOTE ACCESS & VPN
HMI & IPC
PROTOCOLS
SAFETY HMI
SOFT PLC
LEAN MACHINE ANALYTICS
CONDITION MONITORING
EDGE COMPUTING
ENERGY EFFICIENCY
PERFORMANCE CONSULTANCY
REMOTE MONITORING
PREDICTIVE MAINTENANCE
SHIFT MANAGEMENT
RELIABILITY AND UPTIME
INTER OPERABILITY
EDGE CAPABILITY
FUTURE PROOF
SCALABILITY
FLEXIBILITY
BUSINESS MODEL FRIENDLY
SECURITY
DATA ANALYTICS
VIRTUAL LOGIC CONTROL
INDUSTRIAL VIRTUAL REALITY
AUTONOMOUS FACTORY
EXTERNAL MARKETPLACE
INTERNAL MARKETPLACE

CORVINA IoT Platform

Industrial IoT Digital Platform for Smart Manufacturing and Smart Machine Solutions

Who is CORVINA Platform for?

Machine Builders

- Remote monitoring and control
- Data analysis and insights
- Predictive maintenance
- Centralized remote management
- Improved customer experience
- Increased machine performance and efficiency
- Supports Servitization by offering additional services and value to customers

Manufacturers

- Remote monitoring and control of factory operations
- Data analysis and insights for process optimization and waste reduction
- Predictive maintenance for reducing downtime and improving equipment utilization
- Centralized management of multiple factories for standardization and uniformity
- Improved customer satisfaction and experience through efficient and streamlined processes.

System Integrators

- Increased competitiveness
- Improved customer satisfaction
- Increased revenue
- Data-driven decision making
- Scalability
- Supports core business of system integration

Our industrial IoT platform is designed specifically for businesses looking to take advantage of the latest digital technologies to grow and improve their operations.

The platform includes advanced smart manufacturing and smart machine solutions that allow real-time monitoring, predictive maintenance, and remote control capabilities.

These features are easily accessible through a user-friendly interface, and are specifically designed to help businesses increase efficiency, reduce downtime, and improve overall productivity.

CORVINA is the cloud-based, open industrial IoT Platform that provides the technology you need for the industrial world.

CORVINA is the cloud-based, open industrial IoT platform that provides the technology you need for the industrial world. CORVINA is an administration shell for distributed edge systems, integrating data collection, monitoring and control, configuration management, integrated web tools and programming environments to support the machinery and applications throughout its whole lifecycle providing productivity increase and new Business Model based on Services.

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, artificial intelligence, predictive maintenance, data modeling and OT remote monitoring.

The platform offers three main services:

REMOTE ACCESS

The remote access VPN solution allows you to easily and securely connect to your devices and machines that they are connected to. It is an advanced connectivity management solution that puts you in control of your IIoT business.

The platform is entirely web-based and provides users with a way to securely communicate with and manage updates on devices and connected endpoints.

FLEET MANAGEMENT

A complete technology designed to oversee your machine fleet throughout its lifecycle.
Supported by the advanced Artifact Registry, it ensures that essential data and configurations are securely stored in a cloud-based space. This intuitive interface grants a comprehensive global overview of every connected machine. Beyond monitoring, the Fleet Management app also streamlines operations through its OTA application, enabling swift update campaigns using files from the artifact registry, and facilitates effortless maintenance via VPN.

IoT DATA COLLECTION & ANALYSIS

IIoT Data Collection, Visualization and Analysis is the open industrial IIoT Platform. It connects any products, plants, systems, and machines. It allows the data generated by the internet of things to be processed simply and intuitively with advanced analysis. Data is sent from the device to the cloud where it is stored and can be visualized with web-based dashboards. Dashboards can be easily created and edited by users with a drag and drop interface, no programming knowledge is required.

Solution Architecture

IoT data collection, visualization and analysis is the key for machinery servitization and plant digitalization. CORVINA 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, artificial intelligence, predictive maintenance and OT remote monitoring.

Key features

MULTITENANT MANAGEMENT
Easy upgrade, easy customization and ongoing cost savings.

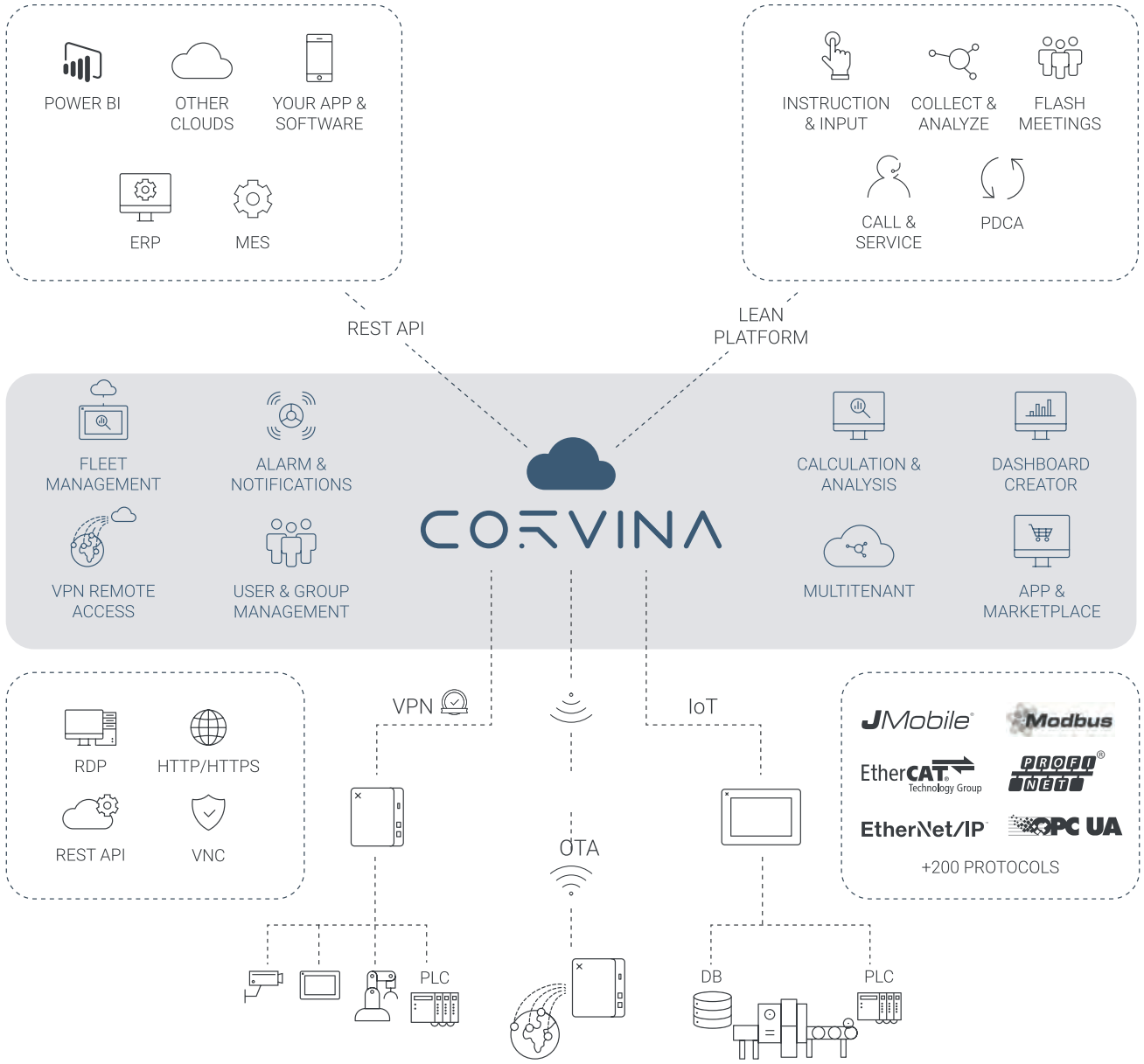
REMOTE MANAGEMENT
Proactive Service based on Alarm, Remote Support to the Customer.

DATA MODELING & ALARMS
Optimize the device connection allowing the creation of profiles for machine models. Protect plant uptime and safety minimizing the impact of abnormal situations.

CUSTOM SDK & REST API
Customize dashboard with implementing widget, kpi, data analysis functions. Offering great deal of flexibility. Data is not tied to resources or methods.

FINE GRAIN ACCESS
Highly specific access constraints to data and function.

DASHBOARD CREATOR & UI CUSTOMIZATION
Autonomously increase profits creating dashboard that shows you relevant data for your business. Placing the visual design in line with your brand provides good secondary sales.



Applications

Overview of the CORVINA applications so far.

Remote Access VPN

Industrial Fleet Management

Advanced Documentation

Predictive Maintenance

Remote Monitoring

Condition Monitoring

Lean Machine Analytics

Energy Efficiency

Performance Consultancy

Shift Management

Custom Apps

Future Apps

HARDWARE


ADVANCED DOCS
EDGE SECURITY
EDGE VISUALIZATION
EMBEDDED
FLEET MANAGEMENT
REMOTE ACCESS & VPN
HMI & IPC
PROTOCOLS
SOFT PLC
SAFETY HMI
LEAN MACHINE ANALYTICS
CONDITION MONITORING
EDGE COMPUTING
ENERGY EFFICIENCY
PERFORMANCE CONSULTANCY
REMOTE MONITORING
PREDICTIVE MAINTENANCE
SHIFT MANAGEMENT
RELIABILITY AND UPTIME
INTER OPERABILITY
EDGE CAPABILITY
FUTURE PROOF
SCALABILITY
FLEXIBILITY
BUSINESS MODEL FRIENDLY
SECURITY
DATA ANALYTICS
VIRTUAL LOGIC CONTROL
INDUSTRIAL VIRTUAL REALITY
AUTONOMOUS FACTORY
EXTERNAL MARKETPLACE
INTERNAL MARKETPLACE

eX700M Series

INDUSTRIAL HMI

RUGGED HMI

IOT CONTROL HMI

MARINE & OFFSHORE

	eX707M
System Resources	
Display - Colors	7" TFT - 16M
Resolution	800x480
Brightness	500 cd/m² typ.
Dimming	Yes
Touchscreen	Projected Capacitive, Multitouch
CPU	64-bit RISC quad core - 1.6 GHz
Operating System	Linux
Flash	8 GB
RAM	2 GB
FRAM	64 KB
RTC, 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 Temperature	-20° to +60 °C (vertical installation). Plug-in and USB devices may limit max temperature to +50 °C
Storage Temperature	-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	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	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
ATEX	Zone 2/22: II 3 G Ex ec IIC T5...T4 Gc, II 3 D Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C"
IECEx	Zone 2/22: Ex ec IIC T5...T4 Gc, Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C"
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
DNV	Yes
RCM	Yes
Part Number	+EX707MU5P1
Ordering Code	101004800U-0000-04

	eX710M	eX712M	eX715M	eX721M
System Resources				
Display - Colors	10.1" TFT - 16M	12.3" TFT - 16M	15.6" TFT - 16M	21,5" TFT - 16M
Resolution	1280x800	1920x720	1366x768	1920x1080
Brightness	500 cd/m² typ.	600 cd/m² typ.	400 cd/m² typ.	300 cd/m² typ.
Dimming	Yes	Yes	Yes	Yes
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	64-bit RISC quad core - 1.6 GHz	64-bit RISC quad core - 1.6 GHz	64-bit RISC quad core - 1.6 GHz	64-bit RISC quad core - 1.6 GHz
Operating System	Linux	Linux	Linux	Linux
Flash	8 GB	8 GB	8 GB	8 GB
RAM	2 GB	2 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB
RTC, RTC Back-up, Buzzer	Yes	Yes	Yes	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)	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 3 serial ports using plug-in modules.			
SD card	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
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)
Current Consumption	1.0 A at 24 Vdc (max.)	1.1 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
Battery	Rechargeable Lithium battery, not user-replaceable			
Environment Conditions				
Operating Temperature	-20° to +60 °C (vertical installation). Plug-in and USB devices may limit max temperature to +50 °C			
Storage Temperature	-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
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
Dimensions and Weights				
Faceplate LxH	282x197 mm (11.10x7.80")	344.5x163 mm (13.56x6.41")	422x267 mm (16.6x10.5")	552x347 mm (21.7x13.66")
Cutout AxB	271x186 mm (10.67x7.32")	332.5x152 mm (13.09x5.94")	411x256 mm (16.18x10")	541x336 mm (21.3x13.22")
Depth D+T	56+8 mm (2.20+0.31")	49+8.5 mm (1.92+0.33")	56+8 mm (2.20+0.31")	56+8 mm (2.20+0.31")
Weight	2.5 Kg	1.8 Kg	4.1 Kg	6.1 Kg
Approvals				
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)			
ATEX	Zone 2/22: II 3 G Ex ec IIC T5...T4 Gc, II 3 D Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C			
IECEx	Zone 2/22: Ex ec IIC T5...T4 Gc, Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C			
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
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
DNV	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes
Part Number	+EX710MU5P1	+EX712MU5P1	+EX715MU5P1	+EX721MU5P1
Ordering Code	101004800U-0001-02	101004800U-0004-02	101004800U-0002-02	101004800U-0003-02

eX700 Series

INDUSTRIAL HMI

RUGGED HMI

IOT CONTROL HMI

MARINE & OFFSHORE

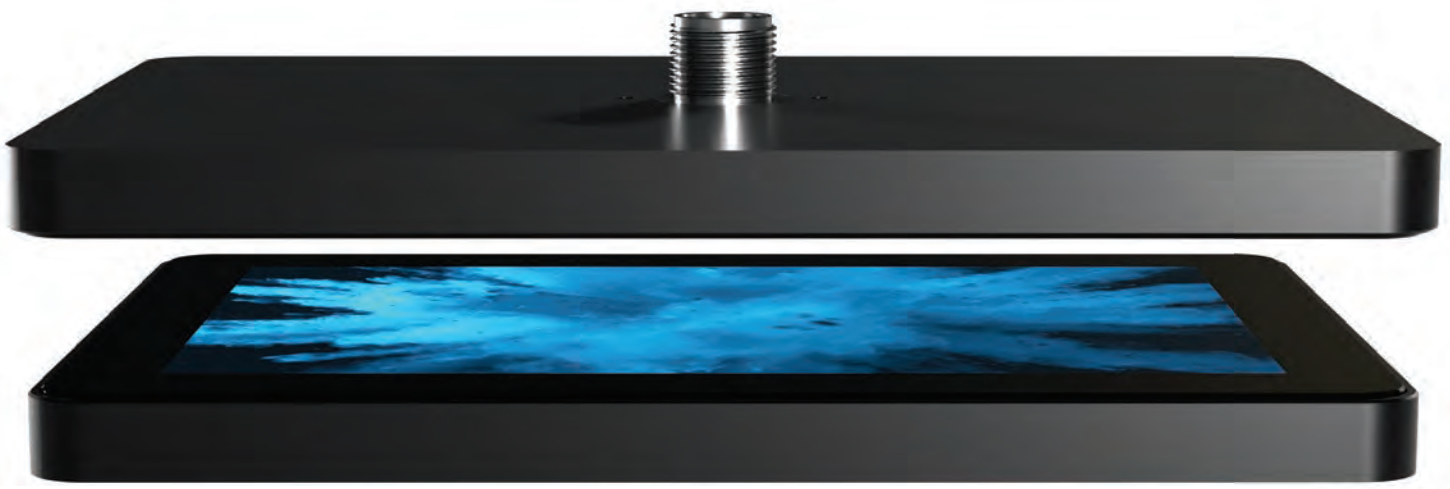
	eX705
System Resources	
Display - Colors	5" TFT - 64K
Resolution	800x480, WVGA
Brightness	300 Cd/m² typ.
Dimming	to 0%
Touchscreen	Projected Capacitive, Multitouch
CPU	32-bit RISC single core - 1 GHz
Operating System	Linux RT
Flash	4 GB
RAM	512 MB
FRAM	64 KB
RTC, RTC Back-up, Buzzer	Yes
Interface	
Ethernet 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 Temperature	-20° to +60 °C (vertical installation). Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temperature	-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	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	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
ATEX	Zone 2/22: II 3 G Ex ec IIC T5...T4 Gc, II 3 D Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C
IECEx	Zone 2/22: Ex ec IIC T5...T4 Gc, Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
DNV	Yes
LR, EU RO MR	Yes
RCM	Yes
Part Number	+EX705U5P1
Ordering Code	101000100U-0000-06





	eX707	eX710	eX712	eX715	eX721
System Resources					
Display - Colors	7" TFT - 16M	10.1" TFT - 16M	12,3" TFT - 16M	15,6" TFT - 16M	21,5" TFT - 16M
Resolution	800x480, WVGA	1280x800, WXGA	1920x720, HD	1366x768, HD	1920x1080, full HD
Brightness	500 Cd/m² typ.	500 Cd/m² typ.	600 Cd/m² typ.	400 Cd/m² typ.	300 Cd/m² 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	32-bit RISC dual core - 800 MHz	32-bit RISC dual core - 800MHz	32-bit RISC quad core - 800MHz	32-bit RISC quad core - 800MHz	32-bit RISC quad core - 800MHz
Operating System	Linux RT	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	8 GB	8 GB	8 GB
RAM	1 GB	1 GB	2 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB	64 KB
RTC, 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)				
USB port	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)	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	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.)	1.0 A at 24 Vdc (max.)	1.1 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 Temperature	-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	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	344.5x163 mm (13.56x6.41")	422x267 mm (16.6x10.5")	552x347 mm (21.7x13.66")
Cutout AxB	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	332.5x152 mm (13.09x5.94")	411x256 mm (16.18x10")	541x336 mm (21.3x13.22")
Depth D+T	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.31")	49+8.5 mm (1.92+0.33")	56+8 mm (2.20+0.31")	56+8 mm (2.20+0.31")
Weight	1.5 Kg	2.5 Kg	1.8 Kg	4.1 Kg	6.1 Kg
Approvals					
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)				
ATEX	Zone 2/22: II 3 G Ex ec IIC T5...T4 Gc, II 3 D Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C				
IECEx	Zone 2/22: Ex ec IIC T5...T4 Gc, Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C				
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
DNV	Yes	Yes	Yes	Yes	Yes
LR, EU RO MR	Yes	Yes	-	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes
Part Number	+EX707U5P1	+EX710U5P1	+EX712U5P1	+EX715U5P1	+EX721U5P1
Ordering Code	101000100U-0005-07	101000100U-0009-06	101000100U-0027-03	101000100U-0013-05	101000100U-0017-05

JSmart700M Series



INDUSTRIAL HMI

RUGGED HMI

IOT CONTROL HMI

MARINE & OFFSHORE

	JSmart707M	JSmart710M	JSmart715M	JSmart721M
System Resources				
Display - Colors	7" TFT - 16M	10.1" TFT - 16M	15.6" TFT - 16M	21.5" TFT - 16M
Resolution	1024x600	1280x800	1366x768	1920x1080
Brightness	400 cd/m^2 typ.	400 cd/m^2 typ.	400 cd/m^2 typ.	400 cd/m^2 typ.
Dimming	Yes	Yes	Yes	Yes
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz
Operating System	Linux	Linux	Linux	Linux
Flash	8 GB	8 GB	8 GB	8 GB
RAM	2 GB	2 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB
RT-Clock, RTC Back-up	Yes	Yes	Yes	Yes
Interface				
Ethernet port	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)
LED	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
Buzzer	Yes	Yes	Yes	Yes
NFC	ISO/IEC 14443A	ISO/IEC 14443A	ISO/IEC 14443A	ISO/IEC 14443A
Wi-Fi	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
Ratings				
Power supply	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3at PoE+	IEEE 802.3bt 4PPoE
Power Consumption	12W max.	14W max.	23W max.	35W max.
Battery	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable
Environment Conditions				
Operating Temperature	-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 Temperature	-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
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
Dimensions and Weights				
Faceplate LxH	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	16.5 mm (0.6")	16.5 mm (0.6")	26.5 mm (1.04")	26.5 mm (1.04")
Weight	0.7 Kg	1.2 Kg	4.0 Kg	6.0 Kg
Approvals				
CE	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)
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
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
DNV	To be planned	To be planned	To be planned	To be planned
RCM	Yes	Yes	Yes	Yes
Part Number	+JS707GB2U5P1	+JS710GC2U5P1	+JS715GD2U5P1	+JS721GE2U5P1
Ordering Code	101004300U-0008-01	101004300U-0009-02	101004300U-0010-01	101004300U-0011-01

JSmart700 Series

INDUSTRIAL HMI

RUGGED HMI

IOT CONTROL HMI

MARINE & OFFSHORE

	JSmart705
System Resources	
Display - Colors	5" TFT – 16M
Resolution	800x480
Brightness	300 cd/m^2 typ.
Dimming	to 0%
Touchscreen	Projected Capacitive – Multitouch
CPU	32-bit RISC dual core - 800 MHz
Operating system	Linux RT
Flash	4 GB
RAM	1 GB
FRAM	64 KB
RT-Clock, 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	No
Buzzer	Yes
Ratings	
Power supply	IEEE 802.3af PoE
Power Consumption	6 W max.
Battery	Yes (rechargeable)
Environment Conditions	
Operating Temperature	-20° to +55° C (vertical installation)
Storage Temperature	-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	148.3x105.1 mm (5.83x 4.13")
Depth D+T+T	16.5 mm (0.06")
Weight	0.5 Kg
Approvals	
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
UL	cULus: UL61010-1 / UL61010-2-201
UL	cULus: Class 1 Div 2
DNV	Yes
RCM	Yes
Part Number	+JS705BA0U5P1
Ordering Code	10100040BL-0003-02




	JSmart707	JSmart710	JSmart715	JSmart721
System Resources				
Display - Colors	7" TFT – 16M	10.1" TFT – 16M	15.6" TFT – 16M	21.5" TFT – 16M
Resolution	1024x600	1280x800	1366x768	1920x1080
Brightness	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%
Touchscreen	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch	Projected Capacitive – Multitouch
CPU	32-bit RISC dual core - 800 MHz	32-bit RISC dual core - 800 MHz	32-bit RISC quad core - 800 MHz	32-bit RISC quad core - 800 MHz
Operating system	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	8 GB	8 GB
RAM	1 GB	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB
RT-Clock, RTC Back-up	Yes	Yes	Yes	Yes
Interface				
Ethernet port	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)
LED	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
Wi-Fi	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
Buzzer	Yes	Yes	Yes	Yes
Ratings				
Power supply	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3at PoE+	IEEE 802.3bt 4PPoE
Power Consumption	12 W max.	14 W max.	23 W max.	35 W max.
Battery	Yes (rechargeable)	Yes (rechargeable)	Yes (rechargeable)	Yes (rechargeable)
Environment Conditions				
Operating Temperature	-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 Temperature	-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
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
Dimensions and Weights				
Faceplate LxH	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")	26.5 mm (1.04")	26.5 mm (1.04")
Weight	0.7 Kg	1.2 Kg	4.0 Kg	6.0 Kg
Approvals				
CE	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)
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
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
DNV	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes
Part Number	+JS707BB1U5P1	+JS710BC1U5P1	+JS715CD1U5P1	+JS721CE1U5P1
Ordering Code	101000400U-0001-02	101000400U-0004-03	101000400U-0008-02	101000400U-0010-02

eX200 Series

INDUSTRIAL HMI

IOT CONTROL HMI

	eX205	eX207	eX210	eX215
System Resources				
Display - Colors	5" - 16.7M	7" - 16.7M	10.1" - 16.7M	15.6" - 16.7M
Resolution	800x480	1024x600	1280x800	1920x1080
Brightness	400 Cd/m2 typ.	400 Cd/m2 typ.	400 Cd/m2 typ.	350 Cd/m2 typ.
Dimming	Yes	Yes	Yes	Yes
Touchscreen	Projected Capacitive - Multitouch	Projected Capacitive - Multitouch	Projected Capacitive - Multitouch	Projected Capacitive - Multitouch
CPU	64-bit RISC quad core - 1.6GHz	64-bit RISC quad core - 1.6GHz	64-bit RISC quad core - 1.6GHz	64-bit RISC quad core - 1.6GHz
Operating System	Linux	Linux	Linux	Linux
Flash	4 GB (pSLC mode)	4 GB (pSLC mode - High reliability)	4 GB (pSLC mode - High reliability)	4 GB (pSLC mode - High reliability)
RAM	2 GB	2 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB
Real Time Clock	Yes	Yes	Yes	Yes
RTC Back-up	Supercapacitor	Supercapacitor	Supercapacitor	Supercapacitor
Interface				
Ethernet port	2 (10/100 Mbit)	2 (10/100 Mbit)	2 (10/100 Mbit)	2 (10/100 Mbit)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)
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)
CAN port	1 (Isolated)	1 (Isolated)	1 (Isolated)	1 (Isolated)
Buzzer	Yes	Yes	Yes	Yes
Indicator Light	1 (RGB LED)	1 (RGB LED)	1 (RGB LED)	1 (RGB LED)
Ratings				
Power supply	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)
Current Consumption	0.35 A max. at 24 Vdc	0.4 A max. at 24 Vdc	0.5 A max. at 24 Vdc	0.75 A max. at 24 Vdc
Input Protection	Electronic	Electronic	Electronic	Electronic
Environment Conditions				
Operating Temperature	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)
Storage Temperature	-30°C to +70°C	-30°C to +70°C	-30°C to +70°C	-30°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
Protection Class	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)
Dimensions and Weights				
Faceplate LxH	147x107 mm (5.79x4.21")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.76")	422x267 mm (16.61"x10,51"")
Cutout AxB	136x96 (5.35"x3.78")	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	411x256 mm (16.18"x10.08")
Depth D+T	29+8 mm (1.14+0.31")	29+8 mm (1.14+0.31")	29+8 mm (1.14+0.31")	35+10 mm (1.38"+0.39") mm
Weight	0.5 Kg	0.7 Kg	1.3 Kg	3.2 Kg
Approvals				
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
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 *
RCM	Yes	Yes	Yes	Yes
Part Number	+EX205U501	+EX207U501	+EX210U501	+EX215U501
Ordering Code	101006200U-0000-01	101006200U-0002-01	101006200U-0004-01	101006200U-0006-01

* Roadmap 2024

eXware & MicroEdge

INDUSTRIAL IOT GATEWAY

	MicroEdge Basic
System Resources	
CPU	32-bit RISC Single Core - 528 MHz
Operating System	Linux Yocto
Flash	4 GB
RAM	512MB
FRAM	64KB
Real Time Clock	Yes
RTC Back-up	Supercapacitor
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)
USB port	1 (2.0 OTG, 500mA max., Type C)
Serial port	1 (RS-485, isolated)
CAN/CAN-FD port	1 (isolated)
Expansion port	Yes
Buzzer	Yes
Indicator Light	1 (RGB LED)
Ratings	
Power supply	24 Vdc (9 to 32 Vdc)
Current Consumption	1.56 A at 24 Vdc (max.)
Input Protection	Electronic
Environment Conditions	
Operating Temp	-20° to +60 °C
Storage Temp	-30°C to +70°C
Operating / Storage Humidity	5-90% RH, non-condensing
Protection Class	IP20
Dimensions and Weight	
Height (H)	110 + 7 mm (4.33" + 0.28")
Width (W)	25.4 mm (1")
Depth (D)	75 mm (2.95")
Weight	0.140 Kg
Approvals	
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
FCC/IC	FCC Part 15 SubpartB Class A ICES-003 issue7 Class A
UL	cULus: UL61010-1 / UL61010-2-201
RCM	Yes
Part Number	**+XME00**
Ordering Code	**102006700U-0000**

	eXware703	eXware707	eXware707M	eXware707Q
System Resources				
CPU	32-bit RISC single core - 1 GHz	32-bit RISC dual core - 800 MHz	64-bit RISC quad core - 1.6 GHz	32-bit RISC quad core - 800 MHz
Operating System	Linux RT	Linux RT	Linux RT	Linux RT
Flash	4 GB	4 GB	8 GB	8 GB
RAM	512 MB	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	64 KB
RT Clock, RTC Back-up, Buzzer	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)
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)	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.	1 (RS-232, RS-485, RS-422, software configurable) Max 3 serial ports using plug-in modules.
SD card	Yes	Yes	Yes	Yes
Expansion	1 slot for plug-in modules	2 slots 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)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.35 A max. at 24 Vdc	0.5 A max. at 24 Vdc	0.5 A max. at 24 Vdc	0.55 A max. at 24 Vdc
Input Protection	Electronic	Electronic	Electronic	Electronic
Battery	Yes	Yes	Yes	Yes
Environment Conditions				
Operating Temperature	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.	-20°C to +60°C - Plug-in modules and USB devices may limit max temperature to +50 °C.
Storage Temperature	-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
Protection Class	IP20	IP20	IP20	IP20
Dimensions and Weights				
Faceplate LxH	45x134 mm (1.77x5.27")	44 x 174 mm	44 x 174 mm	44 x 174 mm
Depth D	102 mm (4.01")	144 mm	144 mm	144 mm
Weight	0.6 Kg	0.7 Kg	0.7 Kg	0.7 Kg
Mounting	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)
Approvals				
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
ATEX	Zone 2: II 3 G Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: II 3 G Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: II 3 G Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: II 3 G Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C
IECEx	Zone 2: Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C	Zone 2: Ex ec IIC T5...T4 Gc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C
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
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
DNV	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes
Part Number	+EXW703U0P1	+EXW707U0P1	+EXW707MU0P1	+EXW707QU0P1
Ordering Code	102000500U-0001-03	102000500U-0004-03	102005100U-0000-02	102000500U-0002-03

JSmart700M Web Series

WEB BASED HMI

INDUSTRIAL HMI

RUGGED HMI

	JSmart707M Web	JSmart710M Web	JSmart715M Web	JSmart721M Web
System Resources				
Display - Colors	7" TFT - 16M	10.1" TFT - 16M	15.6" TFT - 16M	21.5" TFT - 16M
Resolution	1024x600	1280x800	1366x768	1920x1080
Brightness	400 cd/m² typ.	400 cd/m² typ.	400 cd/m² typ.	400 cd/m² typ.
Dimming	Yes	Yes	Yes	Yes
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz	64-bit RISC Quad core - 1.6 GHz
Operating System	Linux	Linux	Linux	Linux
Flash	8 GB	8 GB	8 GB	8 GB
RAM	2 GB	2 GB	2 GB	2 GB
Real Time Clock, RTC Back-up	Yes	Yes	Yes	Yes
Interface				
Ethernet port	10/100 PoE	10/100 PoE	10/100 PoE	10/100 PoE
USB port	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)	1 (Host V2.0, max. 500 mA, available with special cable)
LED	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
Buzzer	Yes	Yes	Yes	Yes
NFC	ISO/IEC 14443A	ISO/IEC 14443A	ISO/IEC 14443A	ISO/IEC 14443A
Wi-Fi	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g	IEEE 802.11a/b/g
Ratings				
Power supply	IEEE 802.3af PoE	IEEE 802.3af PoE	IEEE 802.3at PoE+	IEEE 802.3bt 4PPoE
Power Consumption	12W max.	14W max.	23W max.	35W max.
Battery	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable
Environment Conditions				
Operating Temperature	-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 Temperature	-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
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
Dimensions and Weights				
Faceplate LxH	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	16.5 mm (0.6")	16.5 mm (0.6")	26.5 mm (1.04")	26.5 mm (1.04")
Weight	0.7 Kg	1.2 Kg	4.0 Kg	6.0 Kg
Approvals				
CE	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)	Radio Equipment Directive 2014/53/EU (RED)
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
UL	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
Part Number	+JS707GB2U5PW	+JS710GC2U5PW	+JS715GD2U5PW	+JS721GE2U5PW
Ordering Code	101004300U-0012-01	101004300U-0013-02	101004300U-0014-01	101004300U-0014-01

eX200 Web Series

WEB BASED HMI

INDUSTRIAL HMI

RUGGED HMI




	eX205 Web	eX207 Web	eX210 Web	eX215 Web
System Resources				
Display - Colors	5" - 16.7 M	7" - 16.7M	10.1" - 16.7M	15.6" - 16.7M
Resolution	800x480	1024x600	1280x800	1920X1080
Brightness	400 Cd/m2 typ.	400 Cd/m2 typ.	400 Cd/m2 typ.	350 Cd/m2 typ.
Dimming	Yes	Yes	Yes	Yes
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	64-bit RISC quad core - 1.6GHz	64-bit RISC quad core - 1.6GHz	64-bit RISC quad core - 1.6 GHz	64-bit RISC quad core - 1.6GHz
Operating System	Linux	Linux	Linux	Linux
Flash	4 GB (pSLC mode)	4 GB (pSLC mode)	4 GB (pSLC mode)	4 GB (pSLC mode)
RAM	2 GB	2 GB	2 GB	2 GB
Real Time Clock	Yes	Yes	Yes	Yes
RTC Back-up	Supercapacitor	Supercapacitor	Supercapacitor	Supercapacitor
Interface				
Ethernet port	1 (10/100 Mbit)	1 (10/100 Mbit)	1 (10/100 Mbit)	1 (10/100 Mbit)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)
Buzzer	Yes	Yes	Yes	Yes
Indicator Light	1 (RGB LED)	1 (RGB LED)	1 (RGB LED)	1 (RGB LED)
Ratings				
Power supply	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)	24 Vdc (9 to 32 Vdc)
Current Consumption	0.35 A max. at 24 Vdc	0.4 A max. at 24 Vdc	0.5 A max. at 24 Vdc	0.75 A max. at 24 Vdc
Input Protection	Electronic	Electronic	Electronic	Electronic
Environment Conditions				
Operating Temperature	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)	-20°C to +55°C (vertical installation)
Storage Temperature	-30°C to +70°C	-30°C to +70°C	-30°C to +70°C	-30°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
Protection Class	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)
Dimensions and Weights				
Faceplate LxH	147x107 mm (5.79x4.21")	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.76")	422x267 mm (16.61"x10,51"")
Cutout AxB	136x96 (5.35"x3.78")	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	411x256 mm (16.18"x10.08")
Depth D+T	29+8 mm (1.14+0.31")	29+8 mm (1.14+0.31")	29+8 mm (1.14+0.31")	35+10 mm (1.38"+0.39") mm
Weight	0.5 Kg	0.7 Kg	1.3 Kg	3.2 Kg
Approvals				
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
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 *
RCM	Yes	Yes	Yes	Yes
Part Number	+EX205U50W	+EX207U50W	+EX210U50W	+EX215U50W
Ordering Code	101006200U-0001-01	101006200U-0003-01	101006200U-0005-01	101006200U-0007-01

* Roadmap 2024

eXtreme Series

OUTDOOR HMI

INDUSTRIAL HMI

RUGGED HMI

MARINE & OFFSHORE

XA5	
System Resources	
Display - Colors	5" TFT - 64K
Resolution	800x480
Brightness	500 cd/m² typ.
Dimming	Yes - down to 0%
Touchscreen	Projected Capacitive, Multitouch, Optical Bonding
CPU	32-bit RISC Dual Core - 650 MHz
Operating System	Linux RT
Flash	8 GB
RAM	1 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes, rechargeable battery
Interface	
Ethernet port	2 ports 10/100 Mbit/s
CAN port	2, FD, isolated, up to 1 Mbit/s
USB port	1 Host v. 2.0 500mA
Serial port	RS-485, isolated
Digital Output	1 SSR NO 60V 0.5A
Wi-Fi	IEEE 802.11a/b/g
Sensors	Temperature, 3-Axis Accelerometer, Environment Light
Buzzer	Yes
Expansion	1 slot for plug-in modules
Ratings	
Power supply	24 Vdc (10 to 32 Vdc)
Power consumption	1.4 A at 24 Vdc (max.)
Power management key	Yes
Environment Conditions	
Operating Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66/IP67
Dimensions and Weights	
Faceplate LxH	158.6x115 mm (6.24"x4.53")
Cutout AxB	142.6x99 mm (5.61"x3.90")
Depth D+T	44+6.5 mm (1.73"+0.26")
Weight	0.6 Kg
Approvals	
CE	Radio Equipment Directive 2014/53/EU (RED)
UL	cULus: UL61010-1 / UL61010-2-201
DNV	Yes *
RCM	Yes
Part Number	+XA5U5P1
Ordering Code	101005200U-0000-01

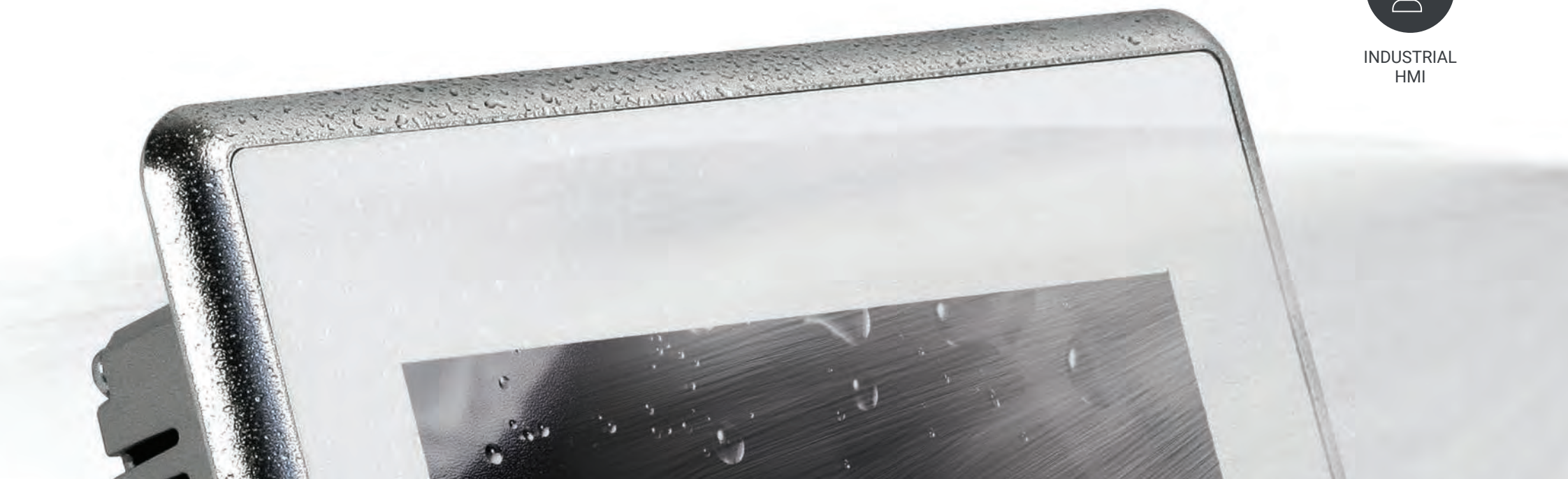
* Roadmap 2025

	eX707G	eX710G	eX715MG	eX715MG Web
System Resources				
Display - Colors	7" TFT - 16M	10.1" TFT - 16M	15,6 TFT - 16M	15,6 TFT LED - 16M
Resolution	800x480	1280x800	1920x1080	1920x1080
Brightness	600 cd/m² typ.	800 cd/m² typ.	700 cd/m² typ.	700 cd/m2 typ.
Dimming	to 0%	to 0%	Yes	Yes
Touchscreen	Projected Capacitive, Multitouch, Optical Bonding	Projected Capacitive, Multitouch, Optical Bonding	Projected Capacitive, Multitouch, Optical Bonding	Projected Capacitive, Multitouch, Optical Bonding
CPU	32-bit RISC Dual core - 800 MHz	32-bit RISC Dual core - 800 MHz	64-bit RISC Quad core - 1.6GHz	64-bit RISC Quad core - 1.6GHz
Operating System	Linux RT	Linux RT	Linux	Linux
Flash	4 GB	4 GB	8 GB	8 GB
RAM	1 GB	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB	-
RT-Clock, RTC Back-up, Buzzer	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)	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)	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.	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
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
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)
Current Consumption	0.7 A at 24 Vdc (max.)	1.0 A at 24 Vdc (max.)	1.35 A at 24 Vdc (max.)	1.35 A at 24 Vdc (max.)
Input Protection	Electronic	Electronic	Electronic	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	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	-30° to +70°C (vertical installation). Plug-in modules and USB devices may limit max temperature to +50 °C	-30° to +70°C (vertical installation). Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temperature	-20°C to +70°C	-20°C to +70°C	-40°C to +85°C	-40°C to +85°C
Operating / Storage Humidity	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
Dimensions and Weights				
Faceplate LxH	187x147 mm (7.36x5.79")	282x197 mm (11.10x7.80")	422x267 mm (16.6x10.5")	422x267 mm (16.6x10.5")
Cutout AxB	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32")	411x256 mm (16.18x10")	411x256 mm (16.18x10")
Depth D+T	47+8 mm (1.85+0.31")	56+8 mm (2.20+0.31")	56+8 mm (2.20+0.31")	56+8 mm (2.20+0.31")
Weight	1.5 Kg	2.5 Kg	4.1 Kg	4.1 Kg
Approvals				
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)			
ATEX	Zone 2/22: II 3 G Ex ec IIC T5...T4 Gc, II 3 D Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C		To be planned	To be planned
IECEx	Zone 2/22: Ex ec IIC T5...T4 Gc, Ex tc IIIC T95°C Dc | -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C		To be planned	To be planned
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
UL	cULus: Class I Div. 2	cULus: Class I Div. 2	cULus: Class 1 Div 2	cULus: Class 1 Div 2
DNV	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes
Part Number	+EX707GU5P1	+EX710GU5P1	+EX715MGU5P1	+EX715MGU5PW
Ordering Code	101000200U-0000-04	101000200U-0002-04	101005500U-0001-03	101005500U-0000-03

eX700FB Series

FOOD &
PHARMACEUTICAL

INDUSTRIAL
HMI



	eX707FB	eX710MFB	eX715FB
System Resources			
Display - Colors	7" TFT 16:9 - 16M	10.1" TFT LED - 16M	15,6" TFT - 16M
Resolution	800x480, WVGA	1280x800, HD	1366x768, HD
Brightness	500 Cd/m² typ.	500 Cd/m2 typ.	400 Cd/m² typ.
Dimming	to 0%	Yes	to 0%
Touchscreen	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch	Projected Capacitive, Multitouch
CPU	32-bit RISC dual core - 800 MHz	64-bit RISC quad core - 1.6 GHz	32-bit RISC quad core - 800 MHz
Operating System	Linux RT	Linux	Linux RT
Flash	4 GB	8 GB	8 GB
RAM	1 GB	2 GB	2 GB
FRAM	64 KB	64 KB	64 KB
Real Time Clock	Yes	Yes	Yes
RTC Back-up	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable
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)	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)	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.	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.)	1.2 A at 24 Vdc (max.)
Input Protection	Electronic	Electronic	Electronic
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	-20° to +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temperature	-20°C to +70°C	-20°C to +70°C	-30°C to +80°C
Operating / Storage Humidity	5-85% RH, non condensing	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 Use of clamping frame may be required	IP69 (front), IP20 (rear) - Type: 12, 4X
Dimensions and Weights			
Faceplate LxH	217x177 mm (8.54x6.96")	310x225 mm (12.20x8.86")	450x295mm
Cutout AxB	176x136 mm (6.93x5.35")	271x186 mm (10.67x7.32)	411x256 mm (16.18x10")
Depth D+T	45+10 mm (1.77+0.4")	50 + 9 mm (1.97"+0.35")	54+10 mm (2,125+0,394")
Weight	2.5 Kg	3.4 Kg	5.2 Kg
Approvals			
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201 *	cULus: UL61010-1 / UL61010-2-201
RCM	Yes	Yes	Yes
Part Number	+EX707U4F1	+EX710MU4F1	+EX715U4F1
Ordering Code	101000300U-0000-05	101006600U-0000-01	101000300U-0001-03

* Roadmap 2024

X Series

MOBILE HMI

INDUSTRIAL HMI

ONE
BY EXOR INTERNATIONAL

X5 Wireless

System Resources	
Display - Colors	5" TFT - 64K colors
Resolution	480x272
Brightness	300 Cd/m² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	32-bit RISC Single Core 528 MHz
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	
CE	Radio Equipment Directive 2014/53/EU (RED) - Machine Directive (2006/42/EC)
FCC	In progress
Electrical Safety	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

Model	Part Number	Ordering Code	Description
X5 Wireless HMI	+X5SWJ0HYE0	10100390YE-0001-02	X5 Wireless HMI
Xbase	+X5B0J000YE0	10100390YE-0000-01	Xbase - Base station X5
Xcharging	+X5C00100YE0	10100390YE-0002-01	Xcharging - Charging station

X5 Wired

System Resources	
Display - Colors	5" TFT LED - 64K colors
Resolution	480x272
Brightness	300 Cd/m² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	32-bit RISC Single Core 528 MHz
Flash	4 GB
RAM	512 MB
FRAM	32 KB
Real Time Clock, RTC Back-up	Yes, rechargeable Lithium battery (not user-replaceable)
Handwheel	Yes
Potentiometer	2 (Optional)
Selector Rotary Switch	16 positions (Optional)
Emergency Stop Button	Yes, illuminated
Enabling Button	3 positions
Status Indicators	1 bi-color LED
Keys	19 user-programmable
Sensors	3-axis Accelerometer
Buzzer	Yes
Interface	
Ethernet	1 (port 0 - 10/100)
USB	2 Host V2.0, 250mA max
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	220x130 (8.66" + 5.12")
Depth D+T	50 mm (1.97")
Weight	Approx 0.8 Kg
Approvals	
CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
UL	cULus: ul61010-1 / UL61010-2-201 *
Safety functions	IEC 61508 / EN ISO 13849-1

Model	Part Number	Ordering Code	Description
X5 Wired	+X5RYEI00Y2201	10100610YE-0003-01	X5 Wired, wheel, cable 10 m
	+X5RYEI00Y4201	10100610YE-0002-01	X5 Wired, wheel, cable 5 m
	+X5RYEISYY1201	10100610YE-0000-02	X5 Wired, wheel, selector, potentiometers, cable 3 m
	+X5RYEISYY3201	10100610YE-0001-01	X5 Wired, wheel, selector, potentiometers, cable 20 m
X Wired Connection Box	+X5BYI01	10500610YI-0000-01	X5 Wired Connection Box
X Wired Docking Cradle	+X5DYE01	10500610YE-0000-01	X5 Wired Docking Cradle

* Roadmap 2024

Accessories JSmart

	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	Electromagnetic Compatibility Directive 2014/30/EU (EMC)	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
UL	cULus: UL61010-1 / UL61010-2-201	cULus: UL61010-1 / UL61010-2-201
RCM	Yes	Yes
Part Number	+JSPOU0P1	+JSPOU0P2
Ordering Code	102000400U-0002-02	102000400U-0003-02

Tube Bracket

+JSBRU001

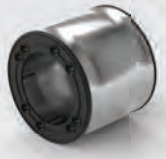
105004000U-0000-01

Tube Bracket

+JSBRU002

105004000U-0001-01

Wall Bracket



+JSBRU003

105004000U-0002-01

Wall Bracket

+JSBRU004

105004000U-0003-01

Multiuse Bracket

+JSBRU009

105004000U-0008-01

Multiuse Bracket

+JSBRU010

105004000U-0009-01

VESA Bracket

+JSBRU005

105004000U-0004-01

Table Stand

+JSBRU006

105004000U-0005-01

Gooseneck Bracket

+JSBRU007

105004000U-0006-01

VESA Adapter Bracket

+JSBRU008

105004000U-0007-01

90° PoE Cable

+JSCAU001

105004000U-0011-02

Ethernet PoE Cable

+JSCAU002

105004000U-0012-02

PoE USB Cable

+JSCAU003

105004000U-0013-02

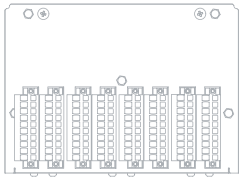
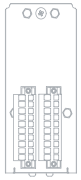
PoE Injector Cable

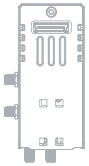
+JSCAU004

105004000U-0014-02

Accessories Plug-In





Model	Ordering Code		Description	Compatible with
PLCM01	+PLCM01U0P1	105002500U-0000-01	Plug-in CAN	eX700, eX700M, eX700FB, eX700G, eXware Series
PLCM02	+PLCM02U001	105002500U-0006-01	Plug-in KNX/EIB (TP interface)	eX700, eX700M, eX700FB, eX700G, eXware Series
PLCM03	+PLCM03U0P1	105002500U-0008-01	Plug-in RS-232	eX700, eX700M, eX700FB, eX700G, eXware Series
PLCM04	+PLCM04U0P1	105002500U-0010-02	Plug-in RS-422/485 with optical insulation	eX700, eX700M, eX700FB, eX700G, eXware Series
PLCM05	+PLCM05U0P2	105002500U-0013-01	Plug-in extender (for use with PLIO03/04)	eX705, eXware703
PLCM06	+PLCM06U0P1	105002500U-0014-01	Plug-in Profibus DP slave 12 MB	eX700, eX700M, eX700FB, eX700G, eXware Series
PLCM10	+PLCM10U0P1	105002500U-0029-01	Plug-in Wireless Modem LTE/4G, Wi-Fi, GNSS	eX700, eX700M, eX700G, eX700FB, eXware Series
PLCM10B	+PLCM10BU0P1	105002500U-0030-01	Plug-in Wireless Modem LTE/4G	eX700, eX700M, eX700G, eX700FB, eXware Series
CODESYS V3 SoftPLC	+SWLC00R000000	104SOFT00U-0022-01	CODESYS V3 activation license	eX700, eX700M, eX700FB, eX700G, eXware, JSmart, eSMART Series
DB Connector	+SWLJ00C000000	104SOFT00U-0067-01	JMobile Native Database Connector	eX700, eX700M, eX700FB, eX700G, eXware, JSmart, eSMART Series
PLIO03	+PLIO03U0P1	105002500U-0020-02	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	eX700, eX700M, eX700FB, eX700G, eXware Series
PLIO04	+PLIO04U0P1	105002500U-0023-01	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	eX700, eX700M, eX700FB, eX700G, eXware Series
PLIO06	+PLIO06U0P1	105002500U-0024-01	Plug-in I/O compact 8 DI, 6 DO, 1 Relay Output	eX700, eX700M, eX700FB, eX700G, eXware Series

exor@scatts.co.uk | www.scatts.co.uk

www.exorint.com

2024.09/EXOR