



eXware

First Step IIoT Compatibility





# ...Our Word Counts



## Key Features

Plug and Forget integration into existing infrastructure

Device data flow easily configured

JMobile protocols and gateway functions

JM4web HTML5 interface for web HMI

CODESYS V3: supports network stacks and local I/O expandability

Direct OPC UA communications

JMcloud secure remote connectivity

Plug-in module for system expansion

2 Ethernet ports for physical separation of the OT and IT networks

Rugged and Beautiful all metal design

Wide operating temperature range

System settings by web browser

Trusted and secure Linux-based operating system

Secure HTTPS/TLS encrypted data transmissions

Mobile Communication via PLCM09 2G/3G modem\*

Support for Geo-Localization\*

IoT data distribution via MQTT\*

# eXware

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

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

For **maximum security** the physical separation of the OT and IT networks with two ethernet ports has been provided and this avoids simultaneous attacks. Secure HTTPS/TLS encrypted data transmissions with signed and packet transfer ensures against data theft and eavesdropping.

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

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

\*Road map for 2017



# eXware703 - Technical Data



Functions	
Role/Application	Gateway, HMI, PLC, secure router - all data intensive IIoT applications
OT Networks	All Major Protocols: PROFITNET, EtherNet/IP, EtherCAT, POWERLINK, Modbus, DNP3, BACnet, etc
Data Communication	OPC UA standard, with pub/sub over TSN*
Cloud Connectivity	Node-RED*, Bluemix*, Azure*, AWS*, Docker*
Operating System	Linux
Security	HTTPS, TLS
System Resources	
CPU	ARM Cortex-A8 1 GHz
Operating System	Linux RT
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	2 (port 0 - 10/100, port 1 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable) Max 2 serial ports using plug-in modules.
SD card	Yes
Expansion	1 slot for plug-in modules
Ratings	
Power supply	24 Vdc (10 to 32 Vdc)
Current Consumption	0.5 A max. at 24 Vdc
Input Protection	Electronic
Battery	Yes
Environment Conditions	
Operating Temp	-20°C to +60°C Plug-in modules and USB devices may limit max temperature to +50 °C.
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5 - 85% RH, non condensing
Protection Class	IP20
Dimensions and Weights	
Faceplate LxH	45x134 mm (1.77x5.27")
Depth D	102 mm (4.01")
Weight	0.6 Kg
Mounting	TS35 DIN Rail
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments



# JMcloud

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## Key Features

All in One Solution

Easily Connects to applications

Secure VPN Tunnel

Efficient server-based Connection  
with Devices

Based on openVPN and OpenSSL  
for Security and Transparency

Option for Web Access from  
Mobile Devices

Full Remote Control of PLC, HMI  
and other devices

Plug and Play solution

Direct Web Access

OPC UA, MQTT\* support

eXware is the ideal base for remote connectivity using Exor's JMcloud: JMcloud is a Secure Open VPN and SSL based solution that allows to remotely manage Industrial installations in an easy and yet extremely safe manner, avoiding expensive interventions on site. Simply by entering the credentials of the JMcloud portal, you have direct access to the system and you will be able to perform maintenance and upgrade, using the JMobile platform. After activating the secure VPN communication to the panel you can reach all the devices connected to the network, such as PLCs, inverters and I/O and you can manage and configure them via proprietary software.

JMobile client and JM4Web, integral parts of the X Platform, allow you to view the user interface through both desktop and mobile devices (smartphones and tablets), providing a full monitoring and preventive maintenance service.

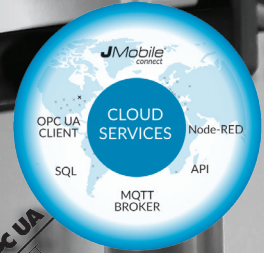
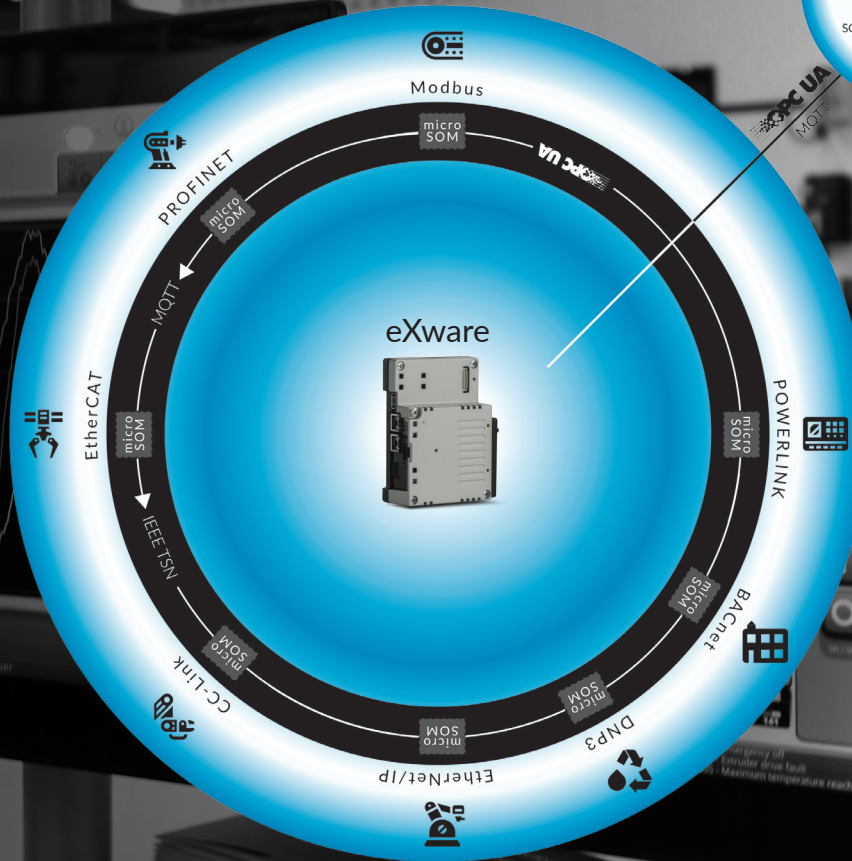
**JMcloud Connect** is an application used to connect to the cloud service and view and connect to all devices enabled and belonging to that domain. This allows direct monitoring and remote control of all devices. The configuration and maintenance of devices are supported.

**JMcloud Servers** are the heart of the whole infrastructure. They store all the configuration data, the access policies, and keep track of the connections to the endpoints (HMI and PLC).

**JMcloud Service** is used by HMI for Cloud connection: For eXware it comes as a system service and the possibility of network separation are already in built.

**PLCM09** is a wireless modem plug in available for the eXware. With 4 LED indicators on module and network status, a microSIM slot and powered via the plug in connection, the PLMC09 adds the ability to communicate with all machines and systems worldwide.

# eXware





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IIoT industry 4.0 ready



PLATFORM