



eXware Tech-Note

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
- Optional 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*

*Road map for 2017

Overview

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

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

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

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

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.

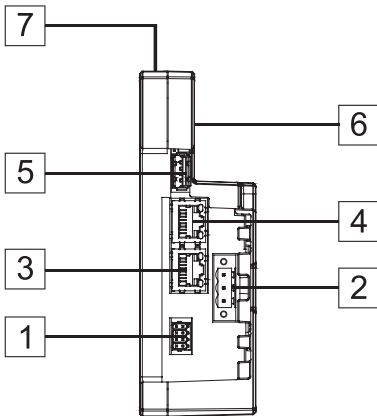
Through use as a **gateway**, a **powerful HMI**, a **PLC with CODESYS V3** or a **secure router**, the eXware facilitates data intensive and complex IIoT applications to be enabled.

Technical Data

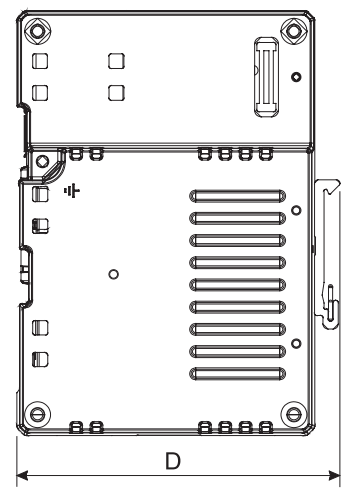
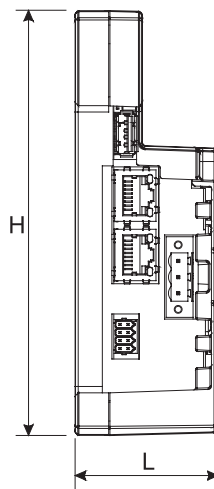


Functions	
Role/Application	Gateway, HMI, PLC, secure router - all data intensive IIoT applications
OT Networks	All Major Protocols: PROFITNET, EtherNet/IP, EtherCAT, POWERLINK, Modbus, DNP3, BACnet, etc
Data Communication	OPC UA standard (pub/sub over TSN*)
Cloud Connectivity	Node-RED*, Bluemix*, Azure*, 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+T	102 mm (4.01")
Weight	0.6 Kg
Mounting	TS35 DIN Rail
Approvals	
CE	Emission EN 61000-6-4 Immunity EN 61000-6-2 for installation in industrial environments

*Road map for 2017



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



Ordering Information

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