

The **XetalO Expander (XetalO-XP)** is an extremely capable programmable industrial input and output application device. The **XetalO-XP** is Class 1 Div 2 certified and offers programmable analog and digital input and output signals for monitoring and/or controlling external sensors and devices.

The **XetalO-XP** can be used with XetaWave products or any other serial or Ethernet wired or wireless product. Two Ethernet and two serial ports allow simple inline connection or the ability to translate from Ethernet to serial or serial to Ethernet.



The **XetalO-XP** is very robust and includes XetaWave's **Data Concentrator, Wire Replacement, PLC, and Terminal Server**. The **Data Concentrator** module gathers and compacts data from many Modbus services into a unified Modbus map or publishes to MQTT. The **Wire Replacement** module replicates an input signal to an output signal across an Ethernet or serial link. The **Terminal Server** function allows serial devices to be connected over Ethernet.

Key Features

Industrial Safe C1D2 certified and operational from -40°C to $+85^{\circ}\text{C}$ for hazardous industrial applications.

I/O Interface 8 programmable multi-functional inputs and outputs configurable as 8 digital or analog inputs or 4 digital and 4 analog outputs.

Robust Flexible Interface Supports 2 Ethernet ports, 2 serial ports, and 1 USB 2.0 port.

Terminal Server Connect to serial devices over Ethernet.

Data Concentrator Converge data from multiple Modbus services into a unified Modbus map or publish using MQTT.

Wire Replacement Replicate input and output signals across an Ethernet, serial or external wireless link.

Modbus Bridge Translate between Modbus RTU and Modbus TCP.

Networking

Protocols	HTTP, HTTPS, FTP, TFTP, Telnet, TCP, UDP, LDP, DHCP, SSH, SNMP, RSS, ARP, ICMP, SYSLOG, SMTP, DNS, BOOTP, PPP
Security	VLAN, 128 or 256 bit AES, SSH, RADIUS
Management	Internal Web Manager, CLI, XML

Interfaces

Data Connectors	2 Ethernet RJ45 2 Serial RJ45 1 Micro USB 2.0
Data Interface Rates	10/100 Mbps Ethernet Up to 921.6 kbps Serial
Serial Protocol	RS232/422/485
Power Connector	2-pin Phoenix

Environmental / Physical

Op Temperature	-40°C to +85°C
Humidity	95% @ +40°C non-condensing
Safety	UL Class 1 Div 2
Dimensions	6.6" x 3.5" x 1.8" (L x W x H) Metal 5.5" x 3.5" x 1.5" (L x W x H) Plastic
Weight	700 grams (Metal) 182 grams (Plastic)

Power

Operating Voltage	+10 Vdc to +32 Vdc
Current	150 mA @ +12 Vdc

Optional 8 Multi-Functional I/O

Programmable Input	8 Digital Voltage Inputs (0 to Operating Voltage) 8 Analog Voltage Inputs (4 @ 0-6 Vdc, 4 @ 0-7.5 Vdc) 4 Analog Current Inputs (0-25 mA)
Programmable Output	4 Digital Outputs (sink current of 2 A) 4 Analog Outputs (1-24 mA)

Ordering

XETAXP-22NMLNA-IO	Metal Enclosed, 2 Ethernet, 2 Serial, 8 Programmable I/O, Linux
XETAXP-22NPLNA-IO	Plastic Enclosed, 2 Ethernet, 2 Serial, 8 Programmable I/O, Linux