

The **XetaIO Serial I/O Expander** is a serial Class 1 Div 2 industrial I/O expander that is simple, reliable, and cost effective. The **Serial XetaIO** offers 8 programmable input and output channels for monitoring and/or controlling external sensors and devices and a serial interface that can be configured for RS-232, RS-422, or RS-485.

The **Serial XetaIO** can be used with XetaWave products or any other serial product. One serial interface is available supporting RS-232, RS-422, and RS-485. When configured for RS-485, a second interface is provided making it easy to daisy chain together additional Serial I/O Expanders or other RS-485 products using standard Ethernet cables.



The **Serial XetaIO** shares a common Modbus map with all of the other XetaWave I/O products like the Ethernet XetaIO, Xeta9S serial I/O radio, XetaEdge, and all Ethernet radios.

Key Features

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

Programmable I/O Independently configure 4 I/O as analog inputs, analog outputs, or digital inputs and 4 I/O as digital inputs or outputs.

Resistors Built-in pull-up and pull-down resistors eliminates the need for external resistors.

Digital Input Multiple digital inputs for monitoring relays, switches, closure sensors, and alarms.

Digital Output Multiple digital outputs for controlling solenoids, latches, valves, pumps, lamps, or relays.

Analog Input Multiple 4-20 mA and 1-5 Vdc analog inputs for connecting sensors measuring temperature, humidity, flow, level, or pressure.

Analog Output Multiple 4-20 mA and 1-5 Vdc analog outputs for connecting to PLCs, RTUs, and flow computers and for wire replacement applications.

Serial XetalO Specifications

Interfaces

Power Connector	2-pin Phoenix / +7 to +32 Vdc
Serial	1 x RJ45 / up to 1Mbps / RS232/422/485 1 x RJ45 / 115.2 kbps / RS232 1 x RJ45 / Up to 1 Mbps / RS485
FGR (optional)	10-pin FGR compatible
I/O	12-pin Phoenix 4 Analog In, Analog Out, or Digital In 4 Digital In or Digital Out 4 Ground

Power

Four AI	< 32 mA @ +12 Vdc
Idle	< 30 mA @ +12 Vdc

Environmental/Physical

Op. Temperature	-40°C to +85°C
Humidity	95% @ +40°C non-condensing
Safety	UL Class 1 Div 2
Dimensions (LxWxH)	5.1" x 3.2" x 1.0" (board level)
Weight	170 grams

Functionality

Programmable I/O	8 programmable input/output signals (4 independently programmed analog inputs, analog outputs, or digital inputs and 4 independently programmed digital inputs or digital outputs)
Statistics	Board supply voltage and temperature reported via Modbus
Faults	Retry or ignore commands selection upon fault conditions
Safety	Do nothing or set output off, on, or last commanded state
Resistors	Built in pull-down resistors can be enabled on I/O pins 1-4 for current inputs or outputs and pull-up resistors can be enabled on I/O pins 5-8 for setting the digital input state.
Analog Input	-0.3 to +6.2 Vdc with 0.5% max error on I/O pins 1-4 and 2.5% max error on I/O pins 5-8 0 to +25 mA with 0.5 max error on I/O pins 1-4
Analog Output	+1 to +24 mA with 0.5% max error on I/O pins 1-4
Digital Input	0 to +30 Vdc
Digital Output	Open or up to 2A switch to ground on I/O pins 5-8
Counters	Count rate up to 0.4 Hz on I/O pins 1-4 and up to 10 Hz on I/O pins 5-8

Ordering

XETA-10NNNNA-IO	Board level, 1 Serial Data & 1 Serial Config & 8 I/O
XETA-10NNNND-FGRIO	Board level, 1 Serial Data & 1 Serial Config & 8 I/O, FGR2 style connector
BRACKET	Metal bracket for mounting the XetalO board on
DINRAIL	DIN rail mount for the BRACKET

