Ethernet to 8 A/D, 2 Optically Isolated Dry Contact Inputs, 2 Solid-State Relay Outputs, Multifunction I/O Adapter, with PoE (802.3af)

Part: 170PoE | **Model:** eI/O AIO-8

Control and monitor eight 12-bit analog inputs, two optically isolated digital inputs and two solid-state relay outputs via any 10/100BaseT Ethernet connection with the eI/O-170PoE multifunction I/O module.

The module provides eight single-ended or four differential A/D inputs that are software configurable for 0-5V, 0-10V, +/-5V, and +/-10V ranges. The A/D inputs support floating/non-referenced or ground referenced selections. This makes the A/D inputs ideal for measuring floating signal sources such as outputs of transformers, thermistors, and battery-powered devices. Additionally, the A/D inputs can operate in bipolar or unipolar modes.

The digital inputs are dry contact, switch-sensing inputs that are internally biased with 5VDC. When the contact closes, current flows through the circuit and an input condition is detected. The inputs are optically isolated and provide 1000VDC isolation to ground. The solid-state Form A SPST relays can switch up to 60VDC at 2.5A. Solid-state relays improve upon mechanical relays by having no moving parts, operating silently and having virtually unlimited switching cycles.

The eI/O-170PoE is a Class 0 (IEEE 802.3af-2003) Power over Ethernet device. This allows power and data to be transferred over a single CAT5 cable and eliminates the need for an external power supply. With PoE, power can be supplied by power sourcing equipment including PoE injectors (midspans) and switches (endspans). I/O connections to field wiring are simplified via removable 3.5mm terminal blocks.

Ready for DIN rail mounting, the eI/O-170PoE includes a removable plastic clip that snaps onto 35mm DIN rail. The clip can also be attached to any flat surface such as a wall or under a counter. Standard operating temperature range of eI/O Ethernet digital I/O modules is 0C to +70C. Status LEDS on the front show power and I/O activity. Additionally, LEDs on the RJ45 connector display Ethernet link and communication activity.

Communicate with eI/O Ethernet digital I/O modules using industry standard Modbus TCP protocol or use the Sealevel SeaMAX API software libraries from your application program. Sealevel's SeaMAX software drivers and utilities make installation and operation easy using Microsoft Windows operating systems.

The Sealevel Modbus Connect app for iOS allows you to access the registers, coils and discrete I/O of your Sealevel Modbus devices and is available on the App Store. Use the app to remotely access I/O in the field or for testing and troubleshooting during application development. The Sealevel Mod+ Connect app is an easy-to-use diagnostic utility that allows you to monitor, test and troubleshoot Sealevel eI/O and SeaI/O modules using your iPhone or iPod touch.

Features & Specifications

Ethernet to 8 AD 2 Optically Isolated Dry Contact Inputs 2 Solid-State Relay Output

Part: 170PoE | **Model:** eI/O AIO-8

Features

- 10/100BaseT Ethernet Modbus TCP interface
- 8 12-bit single-ended, or 4 differential analog inputs
- 2 optically isolated inputs provide dry contact switch sensing
- 2 SPST Form A solid-state relays have no moving parts, operate silently and have virtually unlimited switching cycles
- Field wiring is simplified via removable 3.5mm terminal blocks compatible with 16-30 AWG wire
- Ready for DIN rail mounting, removable plastic clip snaps onto 35mm DIN rail or can be attached to walls and other surfaces with optional screws
- Optional removable spring-clamp terminal blocks available for I/O connections
- PoE version allows power and data over a single CAT5 cable, eliminating the need for an external power supply
- Status LEDs display power, Ethernet link and I/O activity
- Sealevel SeaMAX software supports Microsoft Windows operating systems
- Housed in rugged, attractive plastic enclosure
- Includes 7' CAT5 Ethernet cable (Item# CA246)

Specifications

A/D Inputs	8 Single-Ended or 4 Differential
A/D Range	0-5V, 0-10V, +/-5V, +/-10V
A/D Resolution	12-bits
Analog I/O	A/D Inputs
Family	eI/O
Contact Current	2.5A max.
Contact Operate Time	2.5ms max.
Contact Release Time	0.2ms max.
Contact Voltage	60VDC max.
Digital I/O	Dry Contact Inputs, Solid-State Relays
Dimensions	4.5 (L) x 3.5 (W) x 1.3 (H)
Field Wiring	16 – 30 AWG
Humidity Range	10 – 90% Relative Humidity, Non-Condensing
Input Isolation	1000VDC
Host Interface(s)	Ethernet
Number of Inputs/ Outputs	8 A/D Inputs, 2 Dry Contact Inputs, 2 Solid-State Relay Outputs
Operating Temperature	0°C to 70°C (32°F to 158°F)
Output Type	SPST Form A Reed relays
PoE Powered	Yes
Power Requirement	9-30 VDC @ 1.5W
RoHS Compliant	Yes
Storage Temperature	-50°C to 105°C (-58°F to 221°F)