



RS-485 Modbus RTU Interface to 8 16-bit A/D, 8 Isolated Inputs, 8 Form C Relay Outputs Multifunction Module

Part: 570M | **Model:** Seal/O-570M

The Seal/O-570M, designed using the Linear Technology LTC1867 A/D chip, provides eight single-ended 16-bit analog inputs, eight optically isolated inputs, and eight Form C relay outputs.

The A/D inputs are independently software-selectable for +/- 5V or +/- 15V ranges and feature high input impedance, allowing easy connection to a variety of sensors. 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, and a dipswitch enables a bias voltage of +5 through a 10K resistor for thermistor input mode.

The Seal/O-570M module features eight optically isolated inputs rated for 5-30VDC and provides 3500 VDC external isolation, while the Form C relays are configurable as normally-open or normally-closed and can switch DC loads up to 24W. Perfect for a variety of data acquisition/control and test & measurement applications, the Seal/O-570M includes removable terminal blocks, which simplify field-wiring connections.

The Seal/O-570M is powered from your 9-30VDC source, or select from a variety of Sealevel power supply options. The modules operate over a wide operating temperature range of -20°C to 70°C and extended temperature range is optional.

Communicate with the Seal/O-570M using the Sealevel SeaMAX API software libraries or use any Modbus RTU compliant device. Sealevel's SeaMAX software drivers and utilities make installation and operation easy using Microsoft Windows and Linux operating systems.

Expand your I/O network with Seal/O N-series products. Seal/O modules are available with Reed and Form C relays, optically isolated inputs, TTL interfaces, A/D and D/A functionality. Up to 246 additional expansion modules can be added using convenient pass-through connectors.

Get a jump start on your digital I/O development with The Digital I/O Handbook that will provide helpful information that you will use again and again. Check out Chapter 1 for an overview of logic principles.

Features & Specifications

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Features

- RS-485 Modbus RTU interface
- 8 single-ended 16-bit analog inputs
- 8 optically isolated inputs
- 8 Form C relay outputs
- Removable screw terminals simplify field wiring
- Input power via terminal block or modular connector
- DIN rail or table mount
- Sealevel SeaMAX software supports Microsoft Windows and Linux operating systems

Specifications

A/D Chip	Linear Technology LTC1867
A/D Inputs	8 Single-Ended
A/D Range	+/-5V, +/-15V
A/D Resolution	16-bits
Analog I/O	A/D Inputs
Family	Seal/O
Contact Bounce Time	7ms max.
Contact Current	2A max.
Contact Operate Time	5ms max.
Contact Release Time	5ms max.
Contact Voltage	30VDC max.
Digital I/O	Form C Relay Outputs, Isolated Inputs
Dimensions	7.5 (L) x 5.1 (W) x 1.3 (H)
Extended Temperature	Call for Options
Field Wiring	16 – 30 AWG
Humidity Range	10 – 90% Relative Humidity, Non-Condensing
Input Isolation	2500 VAC RMS, 3500 VDC
Input Range	5-30 VDC
Input Impedance	6.2 K Ohms (in series)
Host Interface(s)	RS-485
Number of Inputs/Outputs	16 Inputs / 8 Outputs
Operating Temperature	-20°C to 70°C (-4°F to 158°F)
Output Specification	24 VDC @ 1A
Output Type	Form C Relay
# of Ports	8/8/8
Power Connector	1.3mm Barrel, Terminal Block, RJ45 Pass-Through
Power Requirement	9-30 VDC @ 2.3W
RoHS Compliant	Yes
Storage Temperature	-50°C to 105°C (-58°F to 221°F)
Switching Capacity	24W