

Communications Module

Model CIO-EN

The CIO-EN Module is a convenient and cost-effective Modbus/TCP and Modbus/RTU interface capable of providing discrete control and monitoring of a 777-P/P-1 over a network. This device can also be used as a standalone device in MCC or enclosed starter applications. The CIO-EN is designed to provide the following benefits in both new and existing installations:

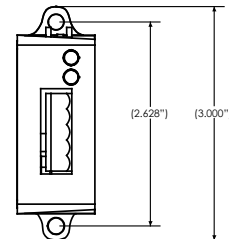
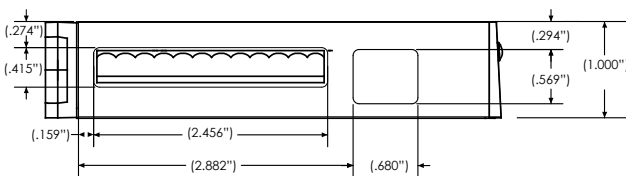
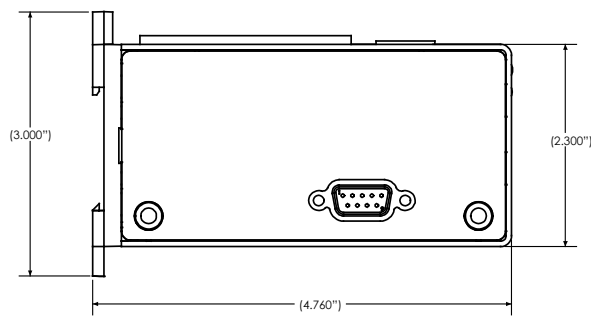
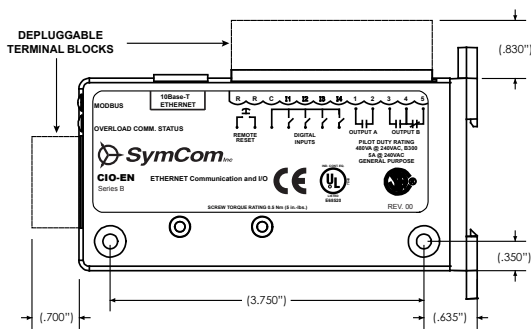
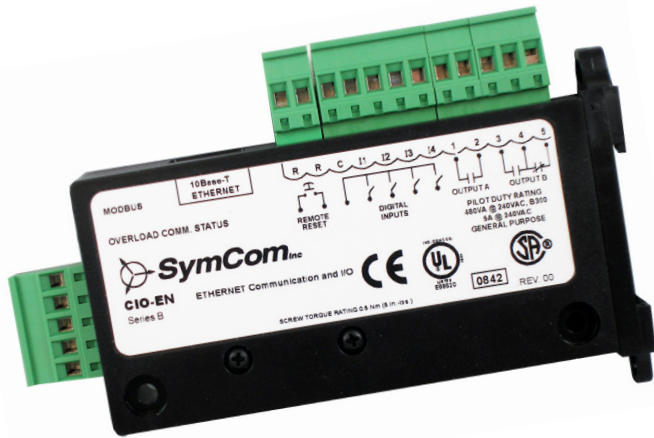
- reduced field wiring
- greater operator efficiency
- ease in system startup and commissioning

The CIO-EN Modbus I/O Module provides four (4) digital inputs and two (2) AC/DC rated relay outputs. It can be DIN rail mounted or mounted directly to a back panel. The CIO-EN's compact size, ease of wiring and Modbus communications capability makes the use of traditional discrete devices on Modbus cost effective and simple. The CIO-EN Module is compatible with SymCom's Model 777-P and 777-P1 overload relays. It simply connects to the side of the 777-P/P1 and, in addition to the extended I/O functions, permits remote monitoring and control of the 777-P/P1 over an Ethernet/RS 485 network. An additional remote reset input is available on the CIO-EN to reset a connected 777-P/P1.

The CIO-EN also possesses a Modbus message assembly feature. The user can configure a block of registers for periodic block reads which minimizes the memory requirements in the scanning device, PLC or SCADA system. It also simplifies the software because all of the data brought back in the device poll is used.

The CIO-EN Module is 10Base-T Ethernet compatible, meaning it is capable of transmitting data at a maximum rate of 10 Megabits/second. TCP/IP Protocols supported by the CIO-EN include:

- Modbus/TCP
- HTTP for an embedded webpage
- FTP for data logging
- ICMP (ping)
- DHCP for automatic IP assignment



Specifications

Functional Specifications	
Remote Reset (for use with optional 777-P/P1 overload)	Normally open pushbutton rated 24VDC, 10mA (min.)
Power Requirements	
Voltage	24VDC (+/- 10%)
Current	95mA (max.) 70mA (typical)
Power	2.28 Watts (max.) 1.7 Watts (typical)
Ethernet Controller	
Compatibility	IEEE 802.3
Capability	10Base-T
Input Characteristics	
General Purpose (4)	
Voltage Range	12-24VDC
Current	2mA (typical)
Output Characteristics	
SPDT (1), SPST (1)	
Pilot Duty	480VA @ 240VAC, B300
General Purpose	5A @ 240VAC
General Characteristics	
Operating Temperature	
Ambient Operating	-20° to 70°C (-4° to 158°F)
Ambient Storage	-40° to 80°C (-40° to 176°F)
Terminal (depluggable terminal block)	
Torque	3in.-lbs. (max.)
Wire AWG	12-20 AWG
Class of Protection	IP20, NEMA 1 (finger safe)
Relative Humidity	10-95%, non-condensing per IEC 68-2-3
Standards Passed	
Electrostatic Discharge (ESD)	IEC 1000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity, Radiated	150 MHz, 10V/m
Fast Transient Burst	IEC 1000-4-4, Level 3, 4kV input power
Hi-Potential Test	Meets UL508 (2 x rated V + 1000V for 1 minute)
Surge	
Input Power	IEC 1000-4-5, Level 1
Inputs/Data Lines	IEC 1000-4-5, Level 2
Safety Marks	
UL	UL508
CSA	C 22.2
CE	IEC 60947-6-2
Enclosure	Polycarbonate
Dimensions	4.76" L x 3.00" W x 1.0" D
Weight	14 oz.
Mounting Method	#8 screws or DIN rail mountable

How to order:

Part Number: CIO-EN



orders@symcom.com / customerservice@symcom.com
(605) 348.5580 / (800) 843.8848 / Fax (605) 348.5685