CONPROSYS Robust I/O Series
Modbus-TCP Ethernet Remote I/O
Power Relay Output 6ch / 6ch Digital Input (Counter)
CPSR-ET7060

The product provides 6 wet contact digital input channels and 6 form A electromechanical relays. It features optical isolation for 3000 VDC of transient overvoltage protection and doesn't have channel-to-channel isolation. Each input channel can be used as a 32-bit counter. The power-on value and safe value of relay are programmable.

Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your inductive load by installing a flyback diode for DC loads or a metal oxide varistor for AC loads.

* The contents in this document are subject to change without notice.
* Visit the CONTEC website to check the latest details in the document.
* The information in the data sheets is as of June, 2025.

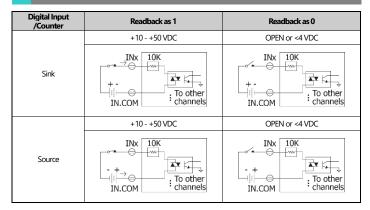* Specifications, color and design of the products are subject to change without notice.

Features

Built-in Web Server
Web HMI
Support for both Modbus TCP and Modbus UDP Protocols
Communication Access Control
Dual Watchdog
I/O Pair Connection
Built-in I/O
  DI/Counter: 6 Channels
  Power Relay: 6 Channels

Specifications

System specification

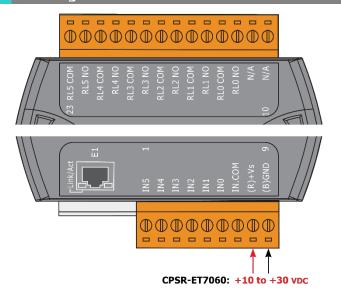| Model	Description
Software	
Built-in Web Server	Yes
CPU Module	
Watchdog Timer	Module, Communication (Programmable)
2-Way Isolation	
Ethernet	1500 VDC
I/O	3000 VDC
EMS Protection	
EFT (IEC 61000-4-4)	±2 kV for Power Line
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal ±8 kV Air for Random Point
Surge (IEC 61000-4-5)	±0.5 kV for Power Line
LED Indicators	
Status	Run, Ethernet
Ethernet	
Ports	1 x RJ-45, 10/100 Base-TX
Access Control	ID, Password and IP Filter
Protocol	Modbus TCP, Modbus UDP
Power	
Reverse Polarity Protection	Yes
Consumption	2.9 W (Max.)
Powered from Terminal Block	+10 to +30 VDC
Mechanical	
Dimensions (mm)	72(W) x 123(L) x 35 (H)
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-25 - +75 ℃
Storage Temperature	-30 - +80 ℃
Humidity	10 - 95% RH, Non-condensing
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA

I/O specification

Item	Description
Digital Input/Counter	
Channels	6
Type	Wet Contact
Sink/Source (NPN/PNP)	Sink/Source
ON Voltage Level	+10 to +50 VDC
OFF Voltage Level	+4 VDC (Max.)
Max. Counts	4,294,967,295 (32-bit)
Frequency	500 Hz
Min. Pulse Width	1 ms
Input Impedance	10 kΩ
Overvoltage Protection	+70 VDC
Relay Output	
Channels	6
Type	Power Relay, Form A (SPST N.O.)
Contact Rating	5 A @ 250 VAC/24 VDC (Resistive Load)
Operate Time	10 ms (Max.)
Release Time	5 ms (Max.)
Electrical Endurance	10^5 ops.
Mechanical Endurance	2×10^7 ops.
Power on Value	Programmable
Safe Value	Programmable

Wire Connections

Digital Input /Counter	Readback as 1	Readback as 0
Sink	+10 – +50 VDC	OPEN or <4 VDC
Source	+10 – +50 VDC	OPEN or <4 VDC

Power Relay	ON State Readback as 1	OFF State Readback as 0
Relay Output		

Pin Assignments

CPSR-ET7060: +10 to +30 VDC