CONPROSYS Robust I/O Series
Modbus-TCP Ethernet Remote I/O
Analog Input 16bit 8ch / 4ch DO
CPSR-ET7017
(Daisy-Chain) Analog Input 16bit 8ch / 4ch DO
CPSR-ET7217

CPSR-ET7017   CPSR-ET7217

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

The product is a module with 8-channel differential analog inputs and 4-channel digital outputs.

It provides programmable input range on all analog channels (±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA and 4 to 20mA) and digital output can be set alarm output with Short-circuit protection and overload protection.

Each analog channel is allowed to configure an individual range and has 240 Vrms high overvoltage protection.

Each analog input can be programmed to accept voltage or current as input depending upon the position of the corresponding jumper.

The sampling rate of product is changeable; there are fast mode and normal mode for your consideration.

The product is also qualified for 4kV ESD protection as well as 2500 VDC intra-module isolation.

* 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.

Features

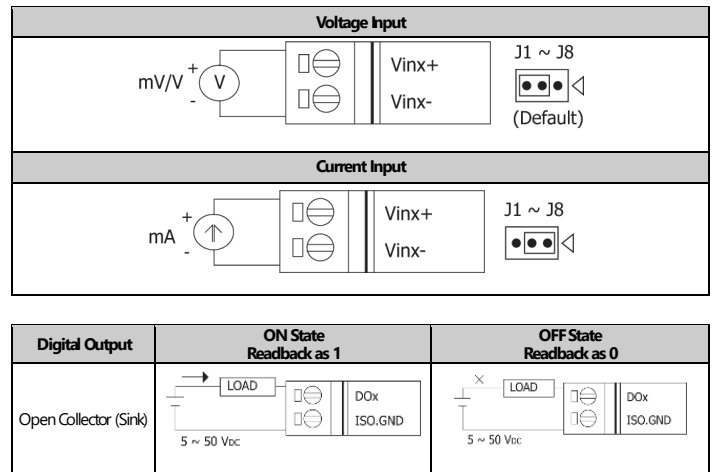**Built-in Web Server**
Web HMI
Support for both Modbus TCP and Modbus UDP Protocols
Communication Access Control
2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring (CPSR-ET7217 only)
Dual Watchdog
I/O Pair Connection
Built-in I/O
  AI: 8 Channels with 240 Vrms Overvoltage Protection
  DO: 4 Channels

Specifications

System specification

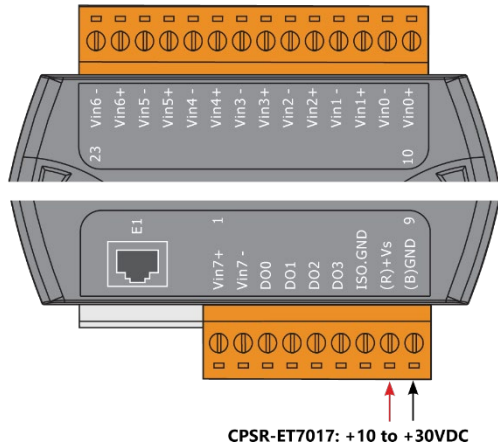| Item		CPSR-ET7017	CPSR-ET7217
Software			
	Built-in Web Server	Yes	
CPU Module			
	Watchdog Timer	Module, Communication (Programmable)	
2-Way Isolation			
	Ethernet	1500 VDC	
	I/O	2500 VDC	
EMS Protection			
	EFT (IEC 61000-4-4)	±4 kV for Power Line	±2 kV for Power Line
	ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal, ±8 kV Air for Random Point	
	Surge (IEC 61000-4-5)	±0.5 kV for Power Line	±2 kV for Power Line
LED Indicators			
	Status	Run, Ethernet	Run, Ethernet, I/O
Ethernet			
	Ports	1 x RJ-45, 10/100 BASE-TX	2 x RJ-45, 10/100 BASE-TX, Switch Ports
	LAN bypass	-	Yes
	Access Control	ID, Password and IP Filter	
	Protocol	Modbus TCP, Modbus UDP	
Power			
	Reverse Polarity Protection	Yes	
	Consumption	2.8 W (Max.)	4.2 W (Max.)
	Powered from Terminal Block	+10 to +30 VDC	+12 to +48 VDC
Mechanical			
	Dimensions (mm)	72(W) x 123(L) x 35(H)	76(W) x 120(L) x 38(H)
	Installation	DIN-Rail mounting	
Environment			
	Operating Temperature	-25 - +75 ℃	
	Storage Temperature	-30 - +80 ℃	
	Humidity	10 - 90% RH, Non-condensing	
	Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA	

I/O specification

Item		Description
Analog Input		
Channels		8 (Differential)
Type		Voltage, Current
Range		±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA, 4 to 20 mA (Jumper Selectable)
Resolution		16-bit
Accuracy	Normal Mode	±0.1%
	Fast Mode	±0.5% or better
Sampling Rate	Normal Mode	10 Hz (total channels)
	Fast Mode	50 Hz (total channels)
Input Impedance	Voltage	2 MΩ
	Current	125 Ω
Common Voltage Protection		±200 VDC
Overvoltage Protection		240 Vrms
Overcurrent Protection		50 mA at 110 VDC (Max.)
Individual Channel Configuration		Yes
Open Wire Detection		For 4 to 20 mA only
Virtual Channel to Channel Isolation		±400 VDC
Digital Output		
Channels		4
Type		Isolated Open Collector
Sink/Source (NPN/PNP)		Sink
Max. Load Current		700 mA/channel
Load Voltage		+5 to +50 VDC
Overvoltage Protection		+60 VDC
Overload Protection		1.4 A
Short-circuit Protection		Yes
Power on Value		Programmable
Safe Value		Programmable

Wire Connections

Voltage Input / Current Input wiring diagrams, J1 ~ J8 jumper settings

Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)		

Pin Assignments

CPSR-ET7017

CPSR-ET7017: +10 to +30VDC

CPSR-ET7217

CPSR-ET7217: +12 to +48VDC