

CONPROSYS Robust I/O Series RS-485 I/O Module 8-ch DI, 8-ch DO CPSR-M7055UDG



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

Features

8 Digital Inputs and 8 Digital Outputs
Sink- or Source-type Digital Input/Output
Digital Input Channels Can be Used as 16-bit Counters
Configurable Power-on Value and Safe Value Settings
Built-in Dual Watchdog

Specifications

System specification

Item	Description
CPU Module	
Watchdog Timer	Module, Communication (Programmable)
Display	
Type	I/O LED Indicator
Isolation	
Intra-module Isolation	2000 VDC
EMS Protection	
EFT (IEC 61000-4-4)	±4 kV for Power Line
ESD (IEC 61000-4-2)	±8 kV Contact for Each Terminal ±15 kV Air for Random Point
Surge (IEC 61000-4-5)	±2 kV for Power Line
LED Indicators	
Status	1 x Power and Communication 8 x DI, 8 x DO
COM Ports	
Ports	1 x RS-485
Baud Rate	1200 - 115200 bps
Data Format	(N, 8, 1), (N, 8, 2), (E, 8, 1), (O, 8, 1)
Protocol	Modbus RTU
Power	
Reverse Polarity Protection	Yes
Input Range	+10 - +48 VDC
Consumption	1.0 W (Max.)
Mechanical	
Dimensions (mm)	72(W) x 122(L) x 34 (H)
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-25 - +75 °C
Storage Temperature	-40 - +85 °C
Humidity	10 - 95% RH, Non-condensing
Standard	VCCI Class A, FCC Class A CE Marking (EMC Directive Class A, RoHS Directive), UKCA

The product module provides 8 isolated channels for Digital Input and 8 isolated channels for Digital Output. Digital Input and Digital Output can be selected as either sink- or source-type via wire connection.

All Digital Input channels are also able to be used as 16-bit counters.

There are options to enable both power-on and safe values.

The product has 16 LED indicators that can be used to monitor the status of the Digital Input and Digital Output channels.

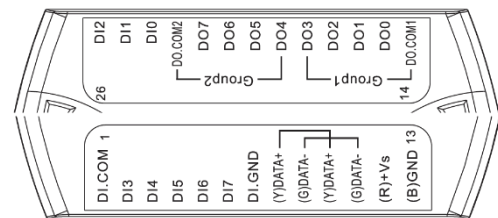
The product provides ±8 kV ESD, ±4 kV EFT and ±2 kV surge protection, as well as 2000 VDC intra-module isolation to enhance noise protection capabilities in harsh industrial environments.

- * 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.

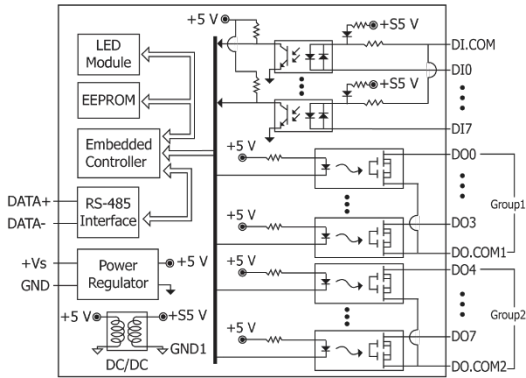
I/O specification

Item	Description
Digital Input/Counter	
Channels	8
Type	Dry Contact, Wet Contact
Sink/Source (NPN/PNP)	Sink/Source
ON Voltage Level	Dry: Close to GND Wet: +10 to +50 VDC
OFF Voltage Level	Dry: Open Wet: +4 VDC Max.
Max. Counts	65535 (16-bit)
Frequency	100 Hz
Min. Pulse Width	5 ms
Input Impedance	10 kΩ
Overvoltage Protection	±70 VDC
Digital Output	
Channels	8
Type	Push-Pull
Sink/Source (NPN/PNP)	Sink/Source
Load Voltage	+3.5 to +80 VDC
Load Current	500 mA/Channel
Power on Value	Programmable
Safe Value	Programmable

Pin Assignments



Internal I/O Structure



Wire Connections

Input Type	ON State Readback as 1
Dry Contact	Close to GND
	OFF State Readback as 0
	Open
Wet Contact (Sink)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.
Wet Contact (Source)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.

Input Type	ON State Readback as 1
Dry Contact	Close to GND
	OFF State Readback as 0
	Open
Wet Contact (Sink)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.
Wet Contact (Source)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.

Input Type	ON State Readback as 1
Dry Contact	Close to GND
	OFF State Readback as 0
	Open
Wet Contact (Sink)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.
Wet Contact (Source)	+10 to +50 VDC
	OFF State Readback as 0
	+4 VDC Max.

DO Group1	ON State Readback as 1
DO0 to DO3 (Sink)	
	OFF State Readback as 0
DO4 to DO7 (Source)	
	OFF State Readback as 0

DO Group1	ON State Readback as 1
DO0 to DO3 (Sink)	
	OFF State Readback as 0
DO4 to DO7 (Source)	
	OFF State Readback as 0

DO Group2	ON State Readback as 1
DO4 to DO7 (Sink)	
	OFF State Readback as 0
DO0 to DO3 (Source)	
	OFF State Readback as 0

DO Group2	ON State Readback as 1
DO4 to DO7 (Sink)	
	OFF State Readback as 0
DO0 to DO3 (Source)	
	OFF State Readback as 0