

CIO-PDIS08

Specifications



**MEASUREMENT
COMPUTING™**

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Specifications

All specifications are subject to change without notice.

Typical for 25°C unless otherwise specified.

Specifications in *italic text* are guaranteed by design.

Relay specifications

Table 1. Relay specifications

<i>Number of relays</i>	8
<i>Contact configuration</i>	5 Form C, SPDT (Relay 0 - 4)
	3 Form A, SPST, Normally open (Relay 5 - 7)
<i>Contact rating</i>	7 A / 30 VDC or 10 A / 125 V AC
<i>Contact resistance</i>	50 milliohms
<i>Coil resistance</i>	70 ohms
<i>Isolation</i>	Between open contacts: 750 VAC, 50/60 Hz, 1 min.
	Between coil and contacts: 1500 VAC, 50/60 Hz, 1 min.
<i>Operate time</i>	10 milliseconds max.
<i>Release time</i>	5 milliseconds max.
<i>Vibration</i>	10 to 55 Hz (dual amplitude 1.5 mm)
<i>Shock</i>	10 G (11 milliseconds)
<i>Insulation resistance</i>	100 M ohms min. (500 V @ 1 minute)
<i>Life expectancy</i>	Mechanical: 10 ⁷ mechanical operations, min.
	Electrical: 100,000 min at full load

Isolated inputs

Table 2. Isolated input specifications

<i>Number</i>	8
<i>Type</i>	Non-polarized, opto-isolated (Not TTL compatible)
<i>Voltage range</i>	DC: 5-28 V
	AC: 5-28 V (50-1000 Hz)
<i>Isolation</i>	500 V
<i>Resistance</i>	1.6 K Ohms min.
<i>Response</i>	without filter: 20 μS
	with filter: 5 mS
<i>Filters</i>	Time constant: 5 ms (200 Hz)
	Filter control: Each input individually switch selectable

Power consumption

Table 3. Power consumption specifications

+5 V Power	All relays off: 0.20 A typical
	All relays on: 0.70 A typical

Environmental

Table 4. Environmental specifications

Operating temperature range	0 to 50 °C
Storage temperature range	-20 to 70 °C
Humidity	0 to 90% non-condensing

Main connector and pin out

Table 5. Main connector specifications

Connector type	37-pin D type (male)
Dielectric strength	>1000 Vrms
Current rating	2 A
Compatible cables	C37FF-x, where x = length in feet C37FFS-x, where x = 5 or 10 feet
Compatible accessory products with the C37FF-x and C37FFS-x	CIO-MINI37 SCB-37

Table 6. Connector pin out

Pin	Signal Name	Pin	Signal Name
1	Input 7A	20	Input 7B
2	Input 6A	21	Input 6B
3	Input 5A	22	Input 5B
4	Input 4A	23	Input 4B
5	Input 3A	24	Input 3B
6	Input 2A	25	Input 2B
7	Input 1A	26	Input 1B
8	Input 0A	27	Input 0B
9	Relay 7 (C)	28	Relay 7 (NO)
10	Relay 6 (C)	29	Relay 6 (NO)
11	Relay 5 (C)	30	Relay 5 (NO)
12	Relay 4 (NC)	31	Relay 4 (C)
13	Relay 4 (NO)	32	Relay 3 (NC)
14	Relay 3 (C)	33	Relay 3 (NO)
15	Relay 2 (NC)	34	Relay 2 (C)
16	Relay 2 (NO)	35	Relay 1 (NC)
17	Relay 1 (C)	36	Relay 1 (NO)
18	Relay 0 (NC)	37	Relay 0 (C)
19	Relay 0 (NO)		

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