

PCI-PDISO16

Specifications



**MEASUREMENT
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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.

Output specifications

Table 1. Output specifications

Number	16
Contact configuration	16 Form C
<i>Maximum current</i>	<i>2.25 A @ 120 VAC or 28 VDC resistive (see Main connector and pin out on page 2)</i>
Contact resistance	100 mΩ max
<i>Operate time</i>	<i>20 ms</i>
<i>Release time</i>	<i>10 ms max</i>
<i>Vibration</i>	<i>10 Hz to 55 Hz (dual amplitude 1.5 mm)</i>
<i>Shock</i>	<i>10 G (11 ms)</i>
<i>Dielectric isolation</i>	<i>500 V (1 minute)</i>
<i>Life expectancy</i>	<i>10 million mechanical operations, min</i>
Power on RESET state	Not energized. NC in contact to Common.

Isolated inputs

Table 2. Isolated input specifications

Number	16	
<i>Isolation</i>	<i>500 V</i>	
Resistance	1.6 KΩ min	
Voltage range	DC	5 V to 28 V (not TTL-compatible)
	AC	5 V to 28 V (50 Hz to 1000 Hz)
Input high level	>5 V min (positive or negative input voltage – not TTL-compatible)	
Input low level	<2.5 V max (positive or negative input voltage)	
Response	Filter disabled	20 μs
	Filter enabled	5 ms
Filters	Time constant	5 ms (200 Hz)
	Filter control	Software-selectable for each input
	Power-up /reset	Filters disabled

Power consumption

Table 3. Power consumption specifications

Parameter	Conditions	Specifications
+5 V power	All relays off	0.7 A typical
	All relays on	2.0 A typical

Environmental

Table 4. Environmental specifications

Operating temperature range	0 °C to 70 °C
Storage temperature range	–40 °C to 100 °C
Humidity	0% to 90% non-condensing

Main connector and pin out

The PCI-PDISO16 has two 50-pin connectors, identified on the board as **P2** and **P3**. **P2** is located next to the main I/O connector bracket at the left side of the board. **P3** is located towards the middle-right side of the board.

Table 5. Main connector specifications

Connector type	50-pin header
Compatible cables (<i>Note 1</i>)	C50FF-x: 50-pin IDC female to female cable. x = length in feet.
	C50-37F-x: 50-pin IDC to 37-pin female D connector (adapter cable for connecting to a PCI-PDISO8 compatible interface) – x = length in feet.
Compatible accessory products (using the C50FF-x cable)	CIO-MINI50 CIO-TERM100 SCB-50
Compatible accessory products (using the C50-37F-x cable)	CIO-MINI37 CIO-TERMINAL SCB-37

Note 1: The C50FF-x and C50-37F-x support a maximum current of 1.0 A.

Table 6. P2 connector pin out

Pin	Signal Name	Pin	Signal Name
50	NC	49	NC
48	NC	47	NC
46	NC	45	NC
44	NC	43	NC
42	NC	41	NC
40	RELAY 6 (NC)	39	RELAY 5 (NC)
38	RELAY 7 (NC)	37	RELAY 0 (NO)
36	RELAY 0 (C)	35	RELAY 0 (NC)
34	RELAY 1 (NO)	33	RELAY 1 (C)
32	RELAY 1 (NC)	31	RELAY 2 (NO)
30	RELAY 2 (C)	29	RELAY 2 (NC)
28	RELAY 3 (NO)	27	RELAY 3 (C)
26	RELAY 3 (NC)	25	RELAY 4 (NO)
24	RELAY 4 (C)	23	RELAY 4 (NC)
22	RELAY 5 (NO)	21	RELAY 5 (C)
20	RELAY 6 (NO)	19	RELAY 6 (C)
18	RELAY 7 (NO)	17	RELAY 7 (C)
16	INPUT 0	15	INPUT 0
14	INPUT 1	13	INPUT 1
12	INPUT 2	11	INPUT 2
10	INPUT 3	9	INPUT 3
8	INPUT 4	7	INPUT 4
6	INPUT 5	5	INPUT 5
4	INPUT 6	3	INPUT 6
2	INPUT 7	1	INPUT 7

Table 7. P3 connector pin out

Pin	Signal Name	Pin	Signal Name
50	NC	49	NC
48	NC	47	NC
46	NC	45	NC
44	NC	43	NC
42	NC	41	NC
40	RELAY 6 (NC)	39	RELAY 5 (NC)
38	RELAY 7 (NC)	37	RELAY 0 (NO)
36	RELAY 0 (C)	35	RELAY 0 (NC)
34	RELAY 1 (NO)	33	RELAY 1 (C)
32	RELAY 1 (NC)	31	RELAY 2 (NO)
30	RELAY 2 (C)	29	RELAY 2 (NC)
28	RELAY 3 (NO)	27	RELAY 3 (C)
26	RELAY 3 (NC)	25	RELAY 4 (NO)
24	RELAY 4 (C)	23	RELAY 4 (NC)
22	RELAY 5 (NO)	21	RELAY 5 (C)
20	RELAY 6 (NO)	19	RELAY 6 (C)
18	RELAY 7 (NO)	17	RELAY 7 (C)
16	INPUT 0	15	INPUT 0
14	INPUT 1	13	INPUT 1
12	INPUT 2	11	INPUT 2
10	INPUT 3	9	INPUT 3
8	INPUT 4	7	INPUT 4
6	INPUT 5	5	INPUT 5
4	INPUT 6	3	INPUT 6
2	INPUT 7	1	INPUT 7

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