

SPECIFICATIONS

CIO-DAS48-PGA /-I) **Analog Input & Digital I/O**



**MEASUREMENT
COMPUTING™**

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POWER CONSUMPTION

+5V: 620 mA typical, 800 mA maximum

ANALOG INPUT SECTION

A/D converter type	AD574
Resolution	12 bits
Number of channels	48 single-ended or 24 differential (configurable as 24 modified differential via installation of SIP resistor)
Input Ranges	
Type	Voltage input or current input, configurable by jumper and installation of SIP resistors for current configuration (CIO-DAS48-I configured for current mode at the factory)
CIO-DAS48-PGA	$\pm 10\text{V}$, $\pm 5\text{V}$, $\pm 2.5\text{V}$, $\pm 1.25\text{V}$, $\pm 0.625\text{V}$, 0 to 10V, 0 to 5V, 0 to 2.5V, 0 to 1.25V software selectable
CIO-DAS48-I	4 to 20 mA, 2 to 10 mA, 1 to 5 mA, and 0.5 to 2.5 mA, software-selectable
Polarity	Unipolar/Bipolar, software-selectable
A/D pacing	Software polled
Data transfer	Software polled
A/D conversion time	25 μs
Throughput	20 kHz, PC dependent
Accuracy	$\pm 0.01\%$ of reading ± 1 LSB
Linearity	± 1 LSB
No missing codes guaranteed	12 bits
Gain drift (A/D specs)	± 25 ppm/ $^{\circ}\text{C}$
Zero drift (A/D specs)	± 10 $\mu\text{V}/^{\circ}\text{C}$
Common Mode Range	$\pm 10\text{V}$
CMRR	72 dB
Input leakage current (@ 25 Deg C)	100 nA
Input impedance	
CIO-DAS48-PGA	10 MegOhms minimum
CIO-DAS48-I	100 Ohms
Absolute maximum input voltage	$\pm 35\text{V}$

ENVIRONMENTAL

Operating temperature range	0 to 50 $^{\circ}\text{C}$
Storage temperature range	-20 to 70 $^{\circ}\text{C}$
Humidity	0 to 95% non-condensing

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