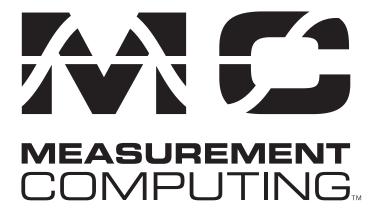
## **SPECIFICATIONS**

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



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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

CIO-DAS48-PGA

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)  $\pm 10V$ ,  $\pm 5V$ ,  $\pm 2.5V$ ,  $\pm 1.25V$ ,  $\pm 0.625V$ , 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  $\pm 1$  LSB

 $\begin{array}{lll} \mbox{Linearity} & \pm 1 \ LSB \\ \mbox{No missing codes guaranteed} & 12 \ \mbox{bits} \\ \mbox{Gain drift (A/D specs)} & \pm 25 \ \mbox{ppm/°C} \\ \mbox{Zero drift (A/D specs)} & \pm 10 \mu \mbox{V/°C} \\ \mbox{Common Mode Range} & \pm 10 \mbox{V} \\ \mbox{CMRR} & 72 \ \mbox{dB} \\ \mbox{Input leakage current (@ 25 \mbox{Deg C)}} & 100 \ \mbox{nA} \\ \end{array}$ 

Input impedance

CIO-DAS48-PGA 10 MegOhms minimum

CIO-DAS48-I 100 Ohms Absolute maximum input voltage ±35V

#### **ENVIRONMENTAL**

Operating temperature range 0 to 50°C Storage temperature range -20 to 70°C

Humidity 0 to 95% non-condensing

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