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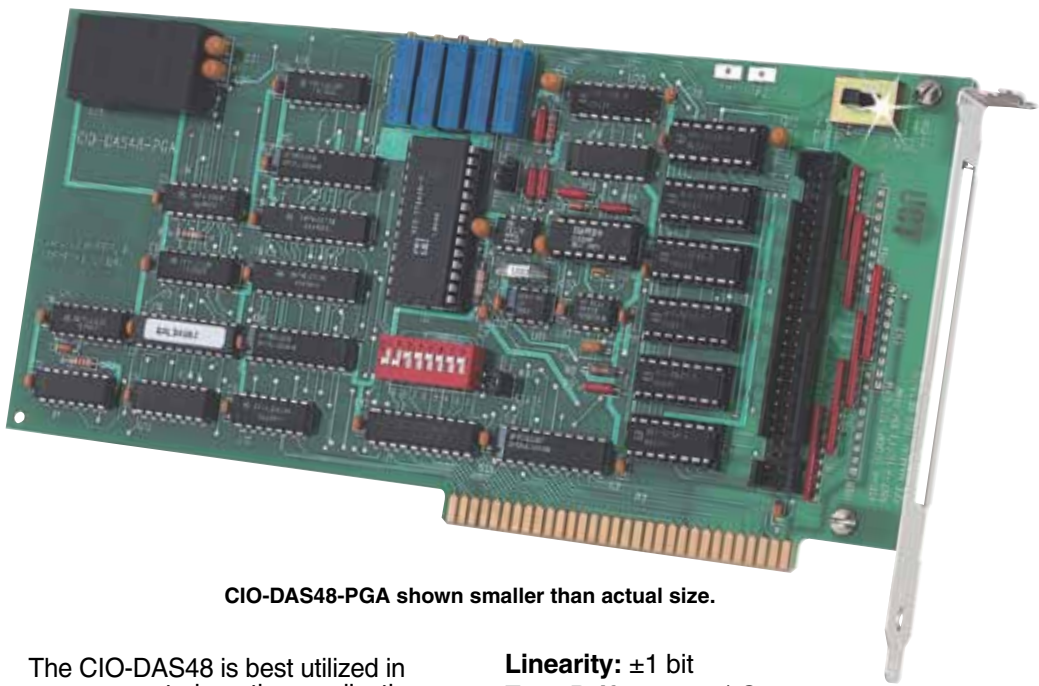
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Find the *Measurement Computing / ComputerBoards CIO-DAS48-PGA* at our website: *Click HERE*

48-Channel, 12-Bit Analog Input Board
Voltage or Current Input with Programmable Gain

CIO-DAS48-PGA

3 YEAR WARRANTY



CIO-DAS48-PGA shown smaller than actual size.

Designed for low speed, high density analog measurement, the CIO-DAS48 is especially suited for 4-20 mA readings. The CIO-DAS48 is available in two models. The CIO-DAS48-PGA accepts either 48 single-ended or 24 differential voltage signals. The CIO-DAS48 is used for process current measurement and can accept 24 current inputs.

Process control sensors with built-in sending units often use 4-20 mA current loop to communicate with the data acquisition system: a computer or programmable controller. Current loop transmission is noise immune. Electromechanical disturbances and RFI from ac voltage sources will not affect the signal level of a 4-20 mA current loop. Noise immunity makes 4-20 mA desirable in factory environments.

The analog input circuit contains a programmable amplifier so the input range is under software control. Both voltage and current input ranges are programmable and although four current input ranges are available, it is likely that the 4-20 mA range is the one you are interested in.

Of course, you may eliminate the screw terminal board and direct wire signals to the CIO-DAS48 through a ribbon cable terminated with a 50 pin connector

The analog input section of the CIO-DAS48 has been designed for flexibility and accuracy in a number of configurations and ranges. The analog signals are brought on board by a standard 50 pin header type connector directly to analog multiplexors. The multiplexors provide 48 channels of single ended input or 24 channels of differential input and are protected against 30 volts max.

A 2 µsec sample & hold captures the signal which is converted by a 574 A/D converter. The 12-bit A/D converter provides a resolution of 1/4095 parts of full scale.

The speed of data gathering is dependent on the CPU speed but in general may not exceed 20KHz on a fast 386 or 486 computer.

The CIO-DAS48 is best utilized in process control or other applications where the A/D samples are initiated under program control.

The CIO-DAS48 may be programmed directly with I/O write and read command providing control from BASIC, C and Pascal. It is quite easy to control the CIO-DAS48 from any language that provides I/O instructions because of the simple register structure.

For those who prefer a language driver or library, the CIO-DAS48 is supported by the Universal Driver programming language package which supports most sWindows languages.

Specifications

Number of Inputs: 48 single-ended or 24 differential voltage (CIO-DAS48-PGA), 24 current (CIO-DAS-48-I)

Input Resolution: 12-bits

Voltage Input Ranges: (CIO-DAS48-PGA): ±10 V, ±5 V, ±2.5 V, ±1.25 V, ±0.625 V, 0-10 V, 0-5 V, 0-2.5 V, 0-1.25 V

Current Input Ranges: (CIO-DAS48-I): 4 to 20 mA, 2 to10 mA, 1 to 5 mA, 0.5 to -2.5 mA

Max. Sample Rate: 20Khz

Impedance for Voltage Input: >10M Ω

Impedance for Current Input: 625 V

Linearity: ±1 bit

Zero Drift: 10ppm/°C

Gain Drift: 50ppm/°C

Operating Temperature: 0 to 50°C (32 to 122°F)

Storage Temperature: -20 to 70°C (-4 to 158°F)

Weight: 142 g (5oz)

OMEGACARE℠ Extended Warranty Program

OMEGACARE℠ extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE℠ covers parts, labor and equivalent loaners.

To Order	
Model No.	**Description**
CIO-DAS48-PGA	48-channel voltage input board
CIO-DAS48-I	24-channel current input board
CIO-MINI50	4 x 4" panel, 50 screw terminals and 50-pin connector
C50FF-2	2' cable

Ordering Example: CIO-DAS48-PGA *48-channel A/D board, with* ***CIO-MINI50*** *terminal panel, C37FF-2 cable and* ***OMEGACARE℠*** *1 year extended warranty for* ***CIO-DAS48-PGA****, (adds 1 year to standard 3 year warranty).*

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