## CIO-EXP16 and CIO-EXP32 16 or 32 Channel Multiplexers for Voltage or Thermocouples

- ✓ 16 or 32 Fully Differential Inputs
- On-Board Signal Amplifiers
- Cold Junction Compensation

Cards

for Thermocouples Designed for CIO-DAS Series



The CIO-EXP16 and CIO-EXP32, respectively, are 16 and 32 channel analog signal multiplexers. These accessory boards, designed for the CIO-DAS08 and CIO-DAS16 cards, can also be used with virtually any A/D board in a variety of multiplexing applications. The CIO-EXP16 multiplexers 16 inputs into a single A/D board channel. The CIO-EXP32 is virtually two CIO-EXP16's, capable of multiplexing 32 inputs into two A/D channels. The A/D card selects the MUX input channel by sending a 4-bit binary value representing that channel. Digital output lines on the A/D card perform this function.

The CIO-EXP boards provide on-board amplifiers for use with low level signals as well as cold junction compensation circuitry, enabling them to read thermocouples directly.

Either four CIO-EXP32 or eight CIO-EXP16 boards may be connected to a CIO-DAS08, thereby expanding the total number of analog inputs to 128.

Either eight CIO-EXP32 or sixteen CIO-EXP16 boards may be connected to a CIO-DAS16, expanding the total number of analog inputs to 256. When used with thermocouples, one A/D board channel is required for the cold junction signal, thus reducing the maximum system analog input channel capacity by 16. If connecting to a CIO-DAS16, the C-MUXAD16-10 cable must be used to connect the CIO-DAS16 to the first CIO-EXP, and the CIO-PG408 DC/DC converter must be installed in each CIO-EXP board.

## For Sales or Service **1-800-826-6342**

## From **\$249**

## SPECIFICATIONS

Channels: 16 or 32 Gains: 1, 10, 100, 200, 500 Input Protection: +/-35V continuous Common Mode Voltage: +/-10V max Common Mode Rejection: >90dB, all ranges Analog Output Voltage: +/-10V max Thermocouple Types: J,K,T,E,S,E,B Cold Junction Compensation: +24.4 mV/C (0V@ 0C)

Accuracy: 0.01% of reading +/-1 bit Power Consumption: CIO-EXP32, 5V @ 26ma, +/-V @36ma; CIO-EXP16, 5V @ 26ma, +/-V @ 25ma

**Dimensions**: CIO-EXP32, 16" x 4" (406 x 102 mm); CIO-EXP16, 9" x 4" (229 x 102 mm)

To Order (Specify Model Number)		
Model Number	Price	Description
CIO-EXP32	\$349	32 channel analog multiplexer with thermocouple inputs (requires cable)
CIO-EXP16	249	32 channel analog multiplexer with thermocouple inputs (requires cable)
C-MUX-AD16-10	40	10' shielded cable. Must be used between CIO-DAS16 and the first CIO-EXP. After that, use any C37FF cable.
CIO-PG408	24	DC/DC converter. Required when using CIO-DAS16
C37FF-2	25	2 foot cable with female connectors
C37FFS-5	30	5-foot shielded cable, 37–pin with female connectors
C37FFS-10	40	10-foot shielded cable, 37-pin with female connectors