

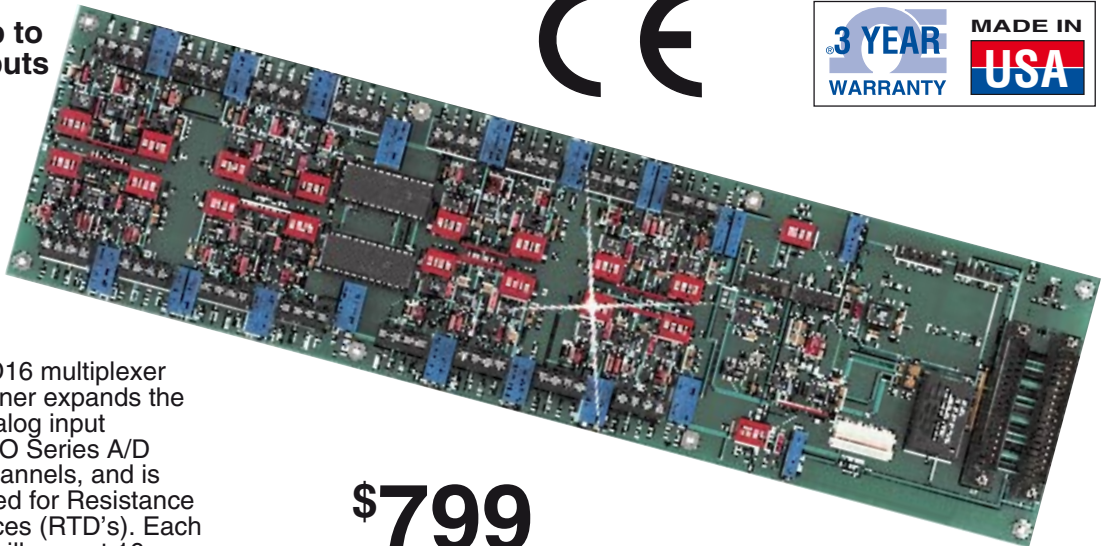


CIO-EXP-RTD16 Series

16-Channel RTD Multiplexer for CIO Series Plug-In Cards

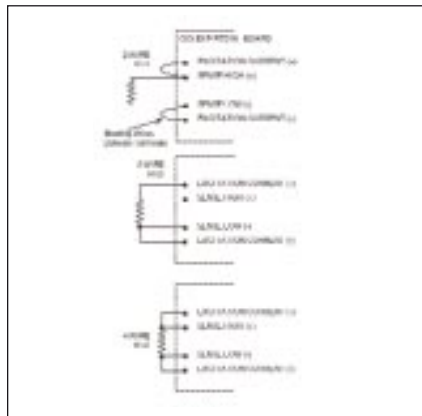


- ✓ Multiplex up to 256 RTD Inputs
- ✓ 2-, 3- or 4-Wire RTD Support
- ✓ On Board Excitation Current



The CIO-EXP-RTD16 multiplexer and signal conditioner expands the total number of analog input channels of any CIO Series A/D board up to 256 channels, and is specifically designed for Resistance Temperature Devices (RTD's). Each CIO-EXP-RTD16 will accept 16 RTD inputs, and is multiplexed into one of the CIO-DAS800/08 (expands up to 128 inputs) or CIO-DAS1600/1400/16 (expands up to 256 inputs) A/D board's analog input channels.

The inputs of the CIO-EXP-RTD16 are designed to provide the excitation and signal conditioning required to use RTD's. RTD's may have 2, 3 or 4 wires which you must connect to the measurement instrument; in this case, a CIO-EXP-RTD16. The three types of RTD16 connections and how to connect them to the input channels are shown below.



\$799
Basic Unit

Connector

Signals from the CIO-EXP-RTD16 exit the board via a 37 D type connector. The pin assignments are consistent with the other CIO-EXP boards, and connect directly to the CIO-DAS800/08 and CIO-DAS1600/1400/16 families of data acquisition boards. Power for the EXP is drawn from a MOLEX connector or directly from the PC.

Specifications

ANALOG INPUTS

Channels: 16, fully differential

Gains: 1, 2, 4, 7, 8, 14, 28, 56

Excitation current: 1 mA

Temperature resolution:

(12-bit A/D board)

-200 to 200°C input range, 0.109°C

-200 to 400°C input range, 0.218°C

assumes .00385 alpha, 100 ohm Platinum RTD

ENVIRONMENTAL

Operating temperature range:

0 to 60°C (32 to 140°F)

Storage temperature range:

-40 to 100°C (-40 to 212°F)

Humidity: 0 to 90% non-condensing

To Order (Specify Model Number)

| Model Number | Price | Description |
|--------------------------|--------------|--|
| CIO-EXP-RTD16 | \$799 | 16-channel RTD multiplexer board |
| CIO-EXP-RTD16/DST | 869 | 16-channel RTD multiplexer board with detachable screw terminals |
| C37FF-2 | 25 | 2' flat ribbon cable for connecting CIO-EXP-RTD16 to CIO-DAS800/08 series input cards |
| C37FFS-5 | 35 | 5' shielded cable for connecting CIO-EXP-RTD16 to CIO-DAS800/08 series interface cards |
| C-EXP2DAS16-10 | 40 | 10' cable for connecting CIO-EXP-RTD16 to CIO-DAS1600/1400/16 series interface cards |
| CIO-TERMINAL | 99 | Screw terminal panel, 16 x 4" (406 x 102 mm) with prototype area |

The CIO-EXP-RTD16 series comes with a complete user's manual.

Ordering Example: CIO-EXP-RTD16 multiplexer, one C37FF-2 cable (assuming unit is to be connected to a CIO-DAS08), and OMEGACARESM 1-year extended warranty for CIO-EXP-RTD16 (adds 1 year to standard 3-year warranty), \$799 + 25 + 80 = **\$904**

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• Flow and Level

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