

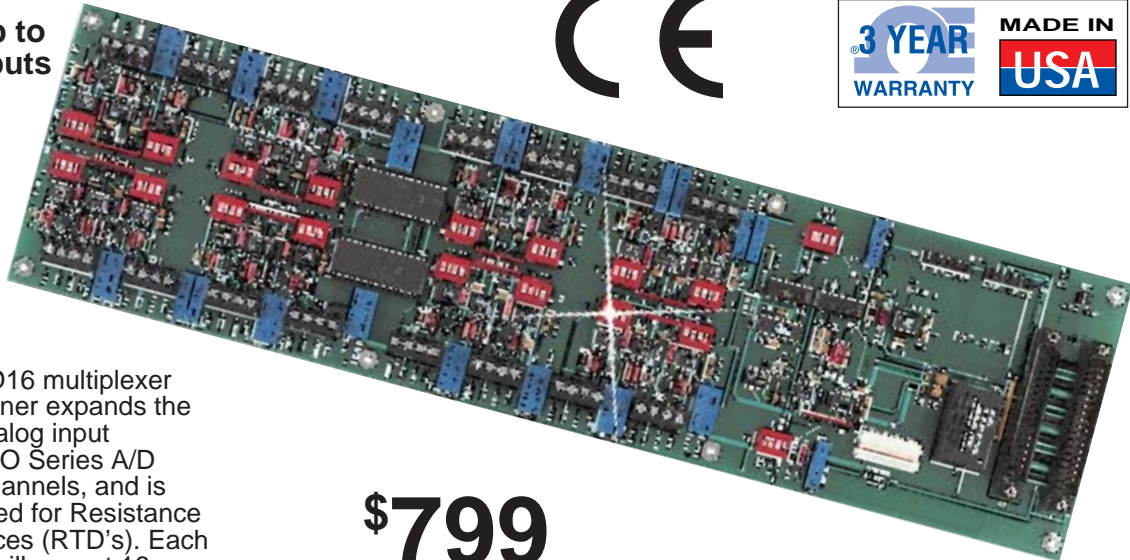


CIO-EXP-RTD16 Series

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

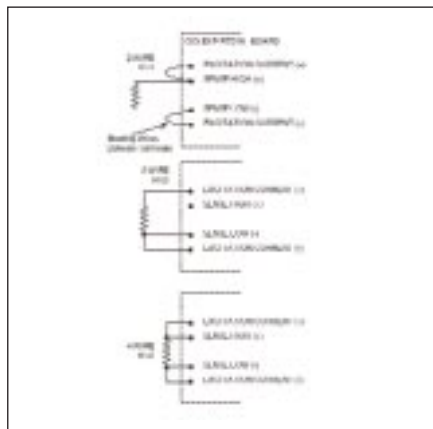


- ✓ Multiplex up to 256 RTD Inputs
- ✓ 2-, 3- or 4-Wire RTD Support
- ✓ On Board Excitation Current



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

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

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• Pressure, Strain and Force

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters