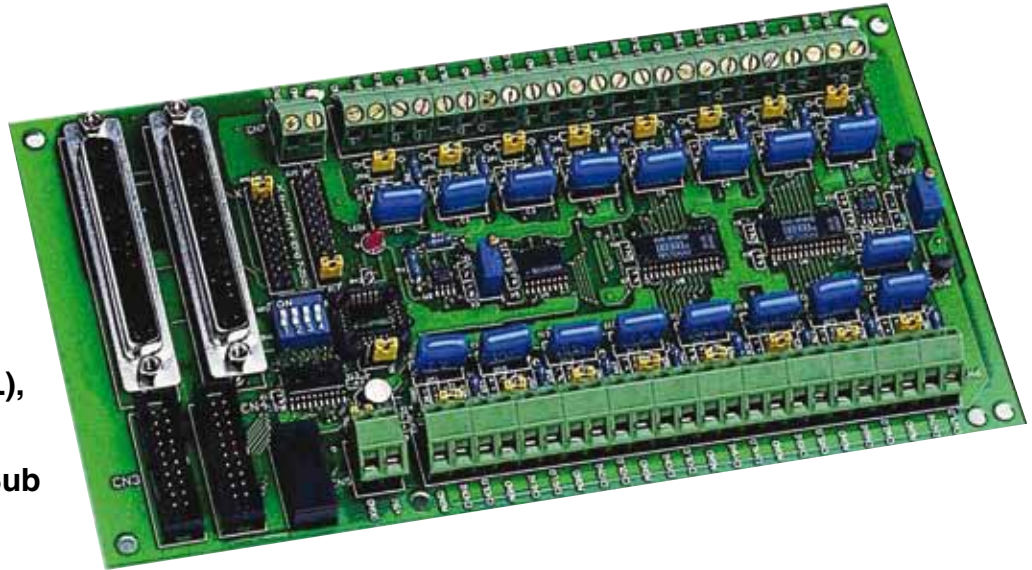


16-Channel Analog Multiplexer Board

OME-DB-889D



OME-DB-889D shown smaller than actual size.

- ✓ Connects Directly to OME-PCI-1800 (H/L), OME-PCI-1802 (H/L), OME-A-822PG, OME-A-8111 with D-Sub 37-Pin Connectors
- ✓ Cold Junction Compensation for Thermocouples, Thermocouple Open Circuit Detection
- ✓ Input Filtering
- ✓ Software Programmable Instrumentation Amplifier Gains of 0.5, 1, 5, 10, 50, 100, 500, 1000
- ✓ Daisy Chain up to 10 OME-DB-889Ds

The OME-DB-889D is an expansion multiplexer/amplifier board for use with OME-PCI-1800 series families. Each OME-DB-889D multiplexes 16 differential analog input channels into one analog input of the DAS board. The high grade instrumentation amplifier provides software programmable gains of 0.5, 1, 5, 10, 50, 100, 500 and 1000. Thermocouple measurements are handled easily with the OME-DB-889D. The board includes cold-junction sensing and compensation circuitry that provides a scaling of 24.4 mV/°C. Biasing resistors are included for open thermocouple detection. The OME-DB-889D can be cascaded to a total of 128 channels of voltage measurements or 112 channels of thermocouple measurement.

The OME-DB-889D has two 37-pin D-sub connectors and two 20-pin headers. One D-sub connector gets connected to the A/D board's analog input connector while the other D-sub connector can be used to cascade to another OME-DB-889D multiplexer.

The 20-pin header is the multiplexer's control logic circuit. One of the 20-pin headers is connected to the A/D board's digital output port via 20-pin flat cable. The other 20-pin header is used to cascade to another OME-DB-889D multiplexer.

Specifications

Accepts Thermocouple Type:

J, K, T, E, S, R, B

Cold Junction Compensation:

+24.4 mV/°C (0.1°C/bit),
0.0V at 0.0°C

Over Voltage Protection:

±30V continuous

Common Mode Voltage:

±10V max

Analog Output Voltage: ±10V

Power Requirement:

+5V @ 120 mA

Dimensions:

114 H x 203 mm W
(4.5 x 8.0")

Operating Temperature:

0 to 50°C (32 to 122°F)

Storage Temperature:

-20 to 70°C (-4 to 158°F)

Humidity: 5 to 90% RH

non-condensing



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

| Gain | Common Mode Rejection | Nonlinearity % of FSR | Settling Time |
|------|-----------------------|-----------------------|---------------|
| 0.5 | 99 dB, ±0.001 | ±0.0004 | 23 us |
| 1 | 99 dB, ±0.001 | ±0.0004 | 23 us |
| 5 | 114 dB, ±0.001 | ±0.0004 | 28 us |
| 10 | 114 dB, ±0.002 | ±0.0004 | 28 us |
| 50 | 123 dB, ±0.002 | ±0.0004 | 140 us |
| 100 | 123 dB, ±0.002 | ±0.0004 | 140 us |
| 500 | 123 dB, ±0.01 | ±0.0008 | 1300 us |
| 1000 | 123 dB, ±0.01 | ±0.0008 | 1300 us |

To Order

| Model No. | Description |
|-------------|--|
| OME-DB-889D | 16-channel analog input mux board |
| OME-CA-3710 | 37-pin D-sub connector cable, 1 m (3') |
| OME-CA-2010 | 20-pin flat cable, 1 m (3') |

OME-DB-889D board comes complete with operator's manual on CD ROM.

Ordering Example: OME-DB-889D analog multiplexer, OME-CA-3710 37-pin cable, OME-CA-2010 20-pin cable and OCW-1, OMEGACARESM 1 year extended warranty for OME-DB-889D extends standard 1-year warranty to a total of 2 years.