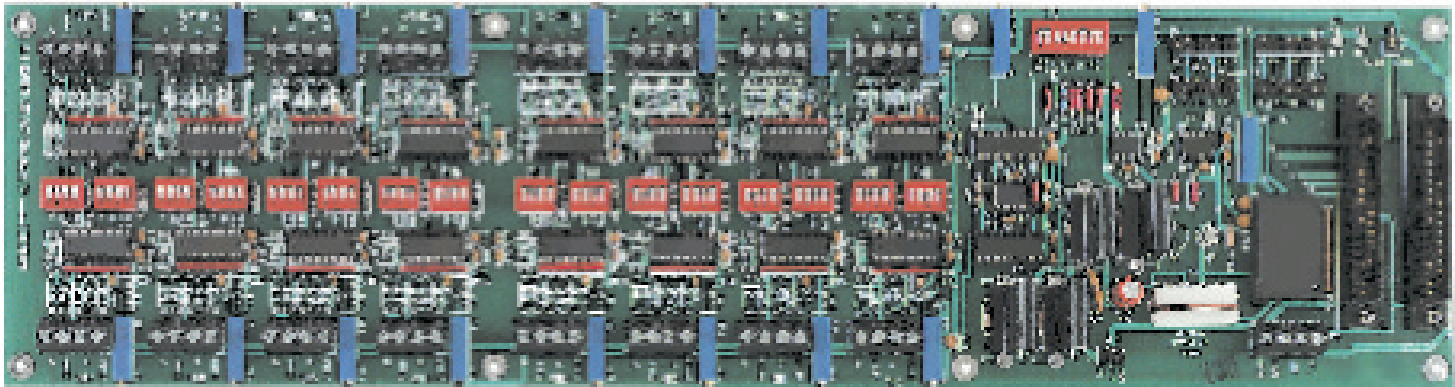


CIO-EXP-BRIDGE16

16-Channel Analog Resistive Bridge Sensor Conditioning Board



\$799



CIO-EXP-BRIDGE16

D1
ANALOG INPUT AND
MULTI-FUNCTION CARDS

- ✓ 16 Differential Inputs
- ✓ Ideal Strain Gage Interface
- ✓ User Selectable Gains, x1, x10, x100 x1000

The CIO-EXP-BRIDGE16 is an analog input multiplexer and signal conditioner designed for bridge type sensors, such as strain gages. Adding one CIO-EXP-BRIDGE expands the analog input channel of any A/D board by 16 channels of bridge type sensors. The 16 bridge inputs are multiplexed into one of the CIO-DAS800/8 or CIO-DAS1600/1400/16 board's analog input channels

The CIO-EXP-BRIDGE16 has circuitry for completing a Wheatstone Bridge. The Wheatstone Bridge is a circuit composed of four resistors and excitation voltage. The circuit is a pair of resistor/dividers working together. The bridge is very sensitive to the values of the resistors, and especially how closely the resistors are matched, or balanced; which they must be for the circuit to work. **PLEASE!** Order precision balancing resistors.

A Wheatstone Bridge needs no reference to ground and does not have a common mode, which means that this circuit can reject noise which a single resistor/divider pair cannot. That is very desirable when you want accurate measurements with sensitive sensors, like strain gages.

Power for the circuits is supplied from the PC or externally through the power connector and regulated by a precision circuit on the CIO-EXP-BRIDGE16. The circuit is robust enough to power sixteen bridges.

To Order (Specify Model No.)		
Model No.	Price	Description
CIO-EXP-BRIDGE16	\$799	Bridge signal conditioner, multiplexer board
CIO-EXP-RES-1000	3	1000Ω precision resistor, 5ppm, 0.1%
CIO-EXP-RES-120	3	120Ω precision resistor, 5ppm, 0.1%
CIO-EXP-RES-350	3	350Ω precision resistor, 5ppm, 0.1%
C37FF-2	25	2 ft. cable to connect the CIO-EXP-BRIDGE16 to a CIO-DAS-800/8 series.
C-EXP2DAS16-10	40	10 ft. cable to connect the CIO-EXP-BRIDGE16 to a CIO-DAS-1600/1400/16 series.

The CIO-BRIDGE16 includes a user's manual.

Ordering Example: CIO-EXP-BRIDGE16, signal conditioner multiplexer board, 12 CIO-EXP-RES-350 bridge completion resistors (enough for four quarter bridges), C37FF-2 cable for connection to CIO-DAS800/8 board (board is also required), \$799 + 12 (3) + 25 = **\$860.**