STRAIN GAGE TO RS-232/RS-485 COMPUTER INTERFACE MODULE





The DMD-480 Series units are self contained, ac powered strain gages to RS-232/RS-485 computer interface modules. Each model contains a precision differential instrumentation amplifier, A/D converter, microprocessor and highly regulated bridge excitation source. The A/D is ratiometric to the excitation supply voltage and provides 15-bit (0.0024%) resolution and is linear up to 0.01% up to 110% of range.

Each unit is completely encapsulated for use in rugged environments.

- **✓** RS-232 or RS-485 Output
- ✓ 15-Bit Resolution
- 10 V Bridge Excitation Supply Capable of Driving 4 Load Cells
- Rugged Epoxy Encapsulated Design
- Basic Software Program Supplied with Unit for Calibration and Datalogging
- ✓ Up to 64 Addresses

SPECIFICATIONS Input:

Voltage, Full Scale:

 $DMD-482 = \pm 25 \text{ mV}$ $DMD-483 = \pm 30 \text{ mV}$ $DMD-485 = \pm 50 \text{ mV}$

Resistance, Differential:

 $>100 M\Omega$

Current: 100 pA

Common Mode Voltage:

0 to +5 Volts



Analog to Digital Conversion:

Resolution: 1 part in 41,000 (15-bit) Conversion Rate: 5 times/second Linearity (Referred to Input): ±0.01% of Full Scale

Temperature Coefficient(0 to 55°C):

Zero Drift (typical) $\pm 0.75~\mu V/^{\circ}C$ Span (typical) $\pm 0.005\%/^{\circ}C$

Bridge Excitation Supply:

Output: 10 Vdc

Adjustment Range: ±3%
Load Current: 120 mA Maximum
Load Regulation: 1 mV typical
Temperature Coefficient:
±0.006%/°C typical

Isolation:

Common to Line Analog & Microprocessor: 500 V rms

Common to Serial Output Analog & Microprocssor: 500 V rms

Power Requirements:

115 Vac ±10 V 50/60 Hz 6 VA (230 Vac ±20 V Available)

Dimensions:

95 L x 51 W x 73 mm H (3.75 L x 2 W x 2.87" H)

Output Connections:

RS-232 Models: DB9 Connector RS-485 Models: Screw Terminals

To Order (Specify Model No.)		
MODEL NO.	PRICE	DESCRIPTION
DMD-482-S2	\$370	±25 mV input/ RS-232 output
DMD-482-S4	370	±25 mV input/ RS-485 output
DMD-483-S2	370	±30 mV input/ RS-232 output
DMD-483-S4	370	±30mV input/ RS-485 output
DMD-485-S2	370	±50 mV input/ RS-232 output
DMD-485-S4	370	±50 mV input/ RS-485 output

Comes with complete operator's manual.
To order with 220Vac power, add suffix "
-220" to Model No.; no additional charge
Ordering Example: DMD-482-S2 converts a

±25 mV input to RS-232, **\$370.**

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