STRAIN AMPLIFIER/SIGNAL CONDITIONER MODULES
FOR STRAIN GAGES, LOAD CELLS, AND TRANSDUCERS

DMD-460 Series

- Bridge Excitation: 4 to 15 Vdc, Up to 120 mA
- Works with 120, 350, 500 Ω and Greater Bridge Circuits
- Adjustable Gain and Offset
- 6-Wire Bridge Connections
- Voltage and Current Output Versions
- 115 and 230 Vac, and DC-Powered Models

The DMD-460 Series bridge amplifiers are self-contained, AC or DC-powered, signal conditioning modules for strain gages, load cells, and bridge-type sensors. The DMD-465 contains a precision differential instrumentation amplifier with voltage output. The similar DMD-465WB has a frequency response to 2 kHz, while the DMD-466 has a 4 to 20 mA output instead of a voltage output.

SPECIFICATIONS
Common
Power: Standard 115 Vac or optional 220 Vac ±10%, 50/60 Hz or 10 to 36 Vdc 0.7 A @ 10V, 0.17 A @ 36V at maximum excitation load
Operating Temperature: 0 to 70°C (32 to 158°F)
Storage Temperature: -25 to 85°C (-13 to 185°F)
Weight: 510 g (18 oz)
Size: 96 L x 51 W x 73 mm H (3.75 x 2 x 2.87")

Bridge Supply
Excitation Voltage Range: 4 to 15 Vdc
Current Output: 120 mA max
Line and Load Regulation: (0 to 100 mA) 0.05% max
Output Noise: 0.5 mVrms

Voltage Output
DMD-465 and DMD-465WB
Gain Range: 40 to 250 (up to 1000 with external resistor on DMD-465 only)

Dynamic Response:
DMD-465: DC to -3 dB = 3 Hz
DMD-465WB: DC to -3 dB = 2 kHz
Max Output (2 kΩ Load): ±10 Vdc
Output Impedance: 0.01 to 1 Ω
Output Offset: -5 to 2 V
Gain Temp Coefficient: 200 ppm/°C
Input Bias Current: 30 nA
Input Impedance: 3000 MΩ
Output Noise (RTO): @ gain = 100
DMD-465: 120 μVrms
DMD-465WB: 1 Hz to 2 kHz = 2 mV
Input Noise Line Frequency: 15 μV p-p
Common-Mode Rejection: 90 dB
Common-Mode Input Voltage: ±15V
Compliance Voltage: 10 Vdc
Output Noise: 1 μA rms @ gain 0.2 mA/V, 1 Hz
Dynamic Response: DC to -3 dB = 3 Hz
Response Time: To 99% of final value 200 ms, typical; to 99.9% of final value 300 ms, typical

Comes complete with operator's manual.

Ordering Examples: DMD-465WB, wide bandwidth amplifier/signal conditioner module with 115 Vac power.
DMD-466, amplifier/signal conditioner module with 4 to 20 mA output.