

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

TRODEKS®

DMD-460 Series



Up to 2 kHz
Dynamic Response
DMD-465WB

- ✓ 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



DMD-465, shown
smaller than actual size.

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 $\pm 10\%$ 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 k Ω Load): ± 10 Vdc

Output Impedance: 0.01 to 1 Ω

Output Offset: -5 to 2V

(DMD-465WB only)

Gain Temp Coefficient: 200 ppm/°C

Input Bias Current: 30 nA

Input Impedance: 3000 M Ω

Output Noise (RTO): @ gain = 100

DMD-465: 120 μ Vrms

DMD-465WB: 1 Hz to 2 kHz = 2 mV

Input Noise Line Frequency: 15 μ V p-p

Common-Mode Rejection: 90 dB @

gain 40, 100 dB @ gain 250

Common-Mode Input Voltage: ± 15 V

4 to 20 mA Transmitter DMD-466

Output: 4 to 20 mA, 0 to 20 mA

Input Range for 20 mA Output:

10 mV min, 50 mV max

Zero Adjust: 0 to ± 12 mA

Linearity: $\pm 0.05\%$ FS

Temperature Stability: 200 ppm/°C

Input Impedance: 1000 M Ω

Common-Mode Rejection: 90 dB

Common-Mode Input Voltage: ± 15 V

Compliance Voltage: 10 Vdc

Output Noise: 1 μ A rms @ gain

0.2 mA/mV, 1 to 100 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

To Order

MODEL NO.	DESCRIPTION
DMD-465	Voltage output
DMD-465-220V	220 Vac powered DMD-465
DMD-465WB	High-frequency voltage output
DMD-465WB-220V	220 Vac powered DMD-465WB
DMD-466	Current output (4 to 20 mA)
DMD-466-220V	220 Vac powered DMD-466
DMD-466-DC	10 to 36 Vdc powered DMD-466
POWER CORD-SE	Power cord with stripped end termination

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.