

# ISOLATED SIGNAL CONDITIONERS WITH TRANSDUCER POWER UP TO 120 mA FOR STRAIN GAGES, LOAD CELLS, AND TRANSDUCERS

## DMD-470 Series



- ✓ 700V I/O Isolation
- ✓ 1100V Line Isolation
- ✓ Power for Four 350 Ω Load Cells, Fixed 10V or Variable 5 to 10 Vdc
- ✓ Adjustable Gain and Offset
- ✓ Large Tare Offset Adjustment
- ✓ 6-Wire Bridge Connections
- ✓ Voltage or Current Output Models

DMD-470 Series bridge amplifiers are AC-powered signal conditioning modules with triple-isolated voltage or current outputs for load cells, bridge-type sensors, and strain gages. Both models have dual zero/tare functions. Zero is used for normal bridge balance, and the tare feature allows up to 68% of the input to be offset while still achieving full output span. The DMD-475 has an isolated voltage output; the DMD-476 is similar but has an isolated 4 to 20 mA output. Both models have input ranges of 5 to 50 mV for a full scale output (0 to 10V or 4 to 20 mA).

### SPECIFICATIONS

#### Common

**Power:** 115 Vac ±10 Vac standard or 220 Vac ±10% 50/60 Hz optional

#### Isolation:

**AC Line:** 1100 Vrms, 60 pF

**Input to Output:** 700 Vdc and 60 pF

#### Operating Temperature:

-25 to 55°C (-13 to 131°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")

5 to 10 Vdc



DMD-475 shown slightly smaller than actual size.

**Current Output:** 120 mA maximum  
**Line and Load Regulation:** 0.02% max  
**Output Noise:** 1 mVrms max (120 Hz)  
**Temp Coefficient:** 60 ppm @ 10V, 100 ppm max

#### DMD-475 (Voltage Output)

**Gain Range:** 200 to 2000  
**Input Range for 10V Output:** 5 to 50 mV  
**Linearity:** ±0.005% FS  
**Temperature Stability:** 0.005%/°C  
**Tare Adjustment:** -3 to 25 mV  
**Input Resistance:** 1000 MΩ  
**Output Zero Adjust:** 0 to 2V  
**Output Range:** -3 to 10 Vdc  
**Output Current:** 5 mA maximum  
**Dynamic Response:** DC to -3 dB = 10 Hz, 2 pole  
**Response Time:** 10 to 90% = 35 ms

#### DMD-476 (4 to 20 mA Transmitter)

**Output:** 4 to 20 mA, 0 to 20 mA  
**Input Range for 16 mA Span:** 5 mV min, 50 mV max  
**Linearity:** ±0.01%  
**Zero Adjust:** 0 to ±12 mA  
**Temperature Stability:** 0.005%/°C  
**Tare Adjustment:** -3 to 25 mV equals 80% of 3 mV/V cell  
**Input Impedance:** 1000 MΩ  
**Common-Mode Rejection:** 100 dB  
**Common-Mode Input Voltage:** 5V  
**Output Zero Adjust:** 0 or 4 mA  
**Output Range:** 4 to 20 mA or 0 to 20 mA  
**Compliance Voltage:** -1 to 20V  
**Dynamic Response:** DC to -3 dB = 10 Hz, 2 pole  
**Response Time:** 10 to 90% = 35 ms

### To Order

MODEL NO	DESCRIPTION
DMD-475	Voltage output (0 to 10 Vdc), 120 Vac
DMD-475-220V	220 Vac powered DMD-475
DMD-476	Current output (4 to 20 mA), 120 Vac
DMD-476-220V	220 Vac powered DMD-476
DMD-476-DC	DC powered DMD-476
POWER CORD-SE	Power cord with stripped end termination

Comes complete with operator's manual.

**Ordering Examples:** DMD-475, isolated voltage output (0 to 10 Vdc) amplifier/signal conditioner module.

DMD-476, isolated current output (4 to 20 mA) amplifier/signal conditioner module.