

# Transducer Display Module

## Model TDM

- Precision low drift bridge excitation supply of 10 Volts
- Powers resistive bridges of 250  $\Omega$  and greater
- Precision, low noise, differential amplifier
- Externally adjustable gains of 50.02, 99.04, 197.08, 394.7 V/V
- Amplified signal is at high-level voltage
- Wide signal bandwidth (20kHz standard)
- Shunt calibration resistance of 100k $\Omega$
- Peak detect/hold feature



## Description

The *Transducer Display Module* is designed to provide a quick-read display for strain-gage based load cells and transducers. It provides bridge excitation and signal amplification and calculates loads for display in pounds or Newtons. A shunt resistor is provided for calibration, along with external adjustments for offset, sensitivity and gain. The peak detect feature allows for the temporary storage and recall of maximum and minimum values.



TDM front panel



TDM back panel

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Rev: 4/28/12

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## Specifications

<u>PARAMETER</u>	<u>SPECIFICATION</u>
<b>BRIDGE EXCITATION</b>	
Type	DC Constant Voltage (Bipolar excitation)
Magnitude	±5.0 V (10 volts total)
Accuracy	0.05%
Temperature Coefficient	0.0005 % / °C (0.00028 % / °F) Max
<b>CALIBRATION</b>	
Shunt Resistance	100k ohm
Shunt Accuracy	0.10%
<b>GAIN</b>	
Values (V/V)	Externally adjustable 50.02, 99.04, 197.08, 394.7
Accuracy	±0.50 % typ (±1.00 % max)
Temperature Coefficient	0.0025 % / °C (0.0014 % / °F)
<b>OUTPUT</b>	
Range	±11 V Max
Frequency Response -3dB	20 kHz
<b>POWER REQUIREMENTS</b>	
Voltage @ 25°C	9-18 VDC
Current	350 mA max
<b>ENVIRONMENT</b>	
Specification & Operation	-40 to +85 °C (-40 to +185 °F)
<b>MECHANICAL</b>	
Weight	1 lb 3 oz.
Length	6.25 in
Height	2.625 in
Width	4.1875 in

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