

441/442 Bridgesensors

Load Cell Signal Conditioners



441/442 Bridgesensor

Standard Features

- Input/output ranges and excitation voltage are selectable by easy-access rotary switches
- Non-interactive zero and span control
- Offset switch allows cancelling or taring of non-zero deadweights
- Excitation voltage of 115 mA (10 V) drives up to four 350-ohm bridges
- Input/output LoopTracker™ LEDs show input/output status
- Functional test push-button with fixed level output to facilitate setup and troubleshooting
- Full isolation (input/output power) eliminates the effects of ground loops and noise

Part Number/Price

Part #	Description	Est. Weight	Price
38902	441 Bridgesensor, 115 VAC	2lb	\$715.00
38904	442 Bridgesensor, 9-30 VDC	2lb	\$815.00

441/442 Input/Output Ranges

Input Spans	Voltage Outputs	Current
0-5 mV0 50 mV	0-1 V	0-20 mA
0-10 mV0 100 mV	0-5 V	4-20 mA
0-20 mV0 200 mV	1-5 V	
0-25 mV0 250 mV	0-10 V	
0-30 mV0 300 mV	±5 V	
0-40 mV0 400 mV	±10 V	

Specifications

Input/Output Ranges:

See table on this page. Other switch-selectable ranges possible.

Input Impedance:

200K ohm typical

Output Capability:

Voltage: ±10 VDC; at ± 10 mA
Current: 25 mA DC; 20 V compliance

Zero/Span Controls:

Top-accessible, multi-turn, non-interactive
Range: ±15% of span typical

Excitation:

Switch-selectable, 0-10 VDC in 1 volt increments
Fine adjust: ±5% via multi-turn potentiometer

Excitation Current Capability:

120 mA DC at 10 VDC excitation; drives up to four 350-ohm load cells at 10 VDC

Excitation Stability:

± 0.01% per degree Celsius

Response Time:

70 mS standard; faster responses available

Sense Lead Compensation:

Better than 0.01% per 1 ohm change in leadwire resistance

Leadwire Resistance:

10 ohm max for 10 VDC excitation/350-ohm bridge

Common Mode Rejection:

100 dB minimum

Isolation:

2,000 V RMS minimum

Operating Temperature Range:

14° F to 140° F (-10° C to 60° C)

Power:

441: 115 VAC, ±10%, 50/60 Hz, 2.5W max
441 Optional: 230 VAC, ±10%, 50/60 Hz, 2.5W max
442: 9-30 VDC at 200 mA typical

Dimensions:

(W x H x D) 1.75 x 2.75 x 2.38 in (not including socket)

Warranty:

Lifetime