

# M210 Display



- Signal Conditioning
- Digital display meter
- Analogue output
- Casing mounted ABS in option

## DESCRIPTION

The M210 is an all-in-one signal conditioning and display meter that adapts to most strain gauge sensors. The M210 meter powers the sensor, amplifies the signals received from the sensor, and presents the results on a display.

The analog output is compatible with control systems and data acquisition cards. A power supply filter helps protect against incorrect voltage supply. The M210 features high bandwidth and low noise level. The large high visibility  $\pm 2,000$  count LED display allows quick reading of the measurements.

Optionally, the M210 can be housed in a rugged ABS case.

## FEATURES

- Analog Output:  $\pm 10V$
- Red LED Display: 2,000 count
- High Bandwidth
- Low Noise Level

## APPLICATIONS

- Instrumentation Laboratory
- Test stand
- Process monitoring
- Rack Mounts

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## PERFORMANCE SPECIFICATIONS

**Ambient Temperature: 20±1°C (unless otherwise specified)**

### General Characteristics

Dimensions (H x L x W)	48 x 96 x 155 mm [1.9 x 3.8 x 6.1 in]
Panel Cut-out	92 x 45 mm [3.6 x 1.8 in]
Operating Temperature	0° C to 50° C [32 to 122° F]
Storage Temperature	-40° C to 85° C [-40 to 185° F]
Relative Humidity	<95% at 40° C [104° F]
Rear panel connectors	
Weight	600g [1.3lb]

### Electrical Characteristics

Standard Operating Power Voltage	115/230 Vac ± 10%, 50 to 60 Hz
Power Supply Filter with Overvoltage Protection	
Optional Operating Power Voltage	12, 24, Vdc
Consumption	6VA
Sensor Excitation	10Vdc, 50mA maximum (±5V)
Sensor Sensitivity	10 to 1000mV F.S.

### Amplification

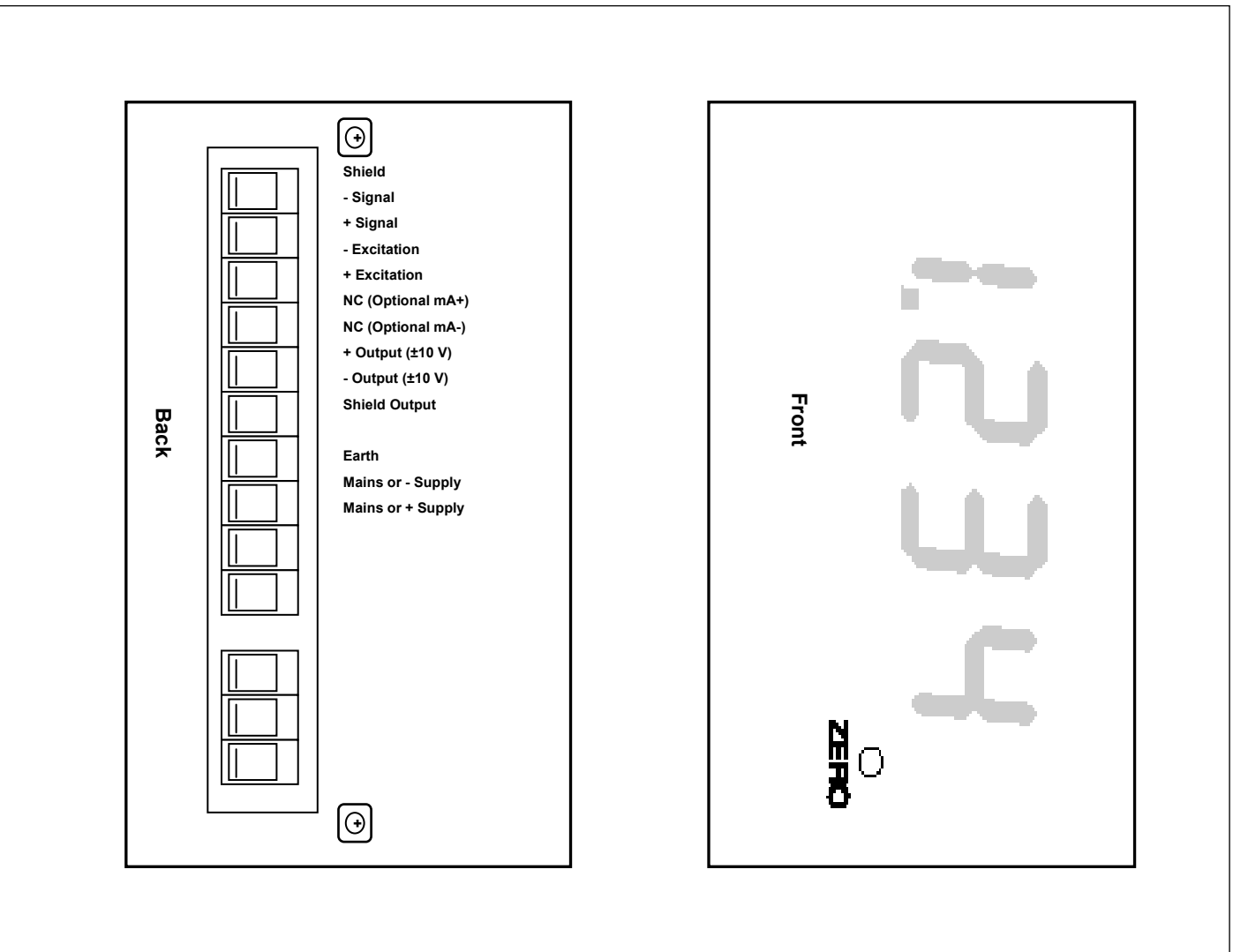
Span	10 to 1000
Analog Output	10Vdc ± 0.05% F.S.
Bandwidth at -3dB	1kHz
Noise Level	<10mV peak to peak

### Display

Type	Red LED Display ± 2000 count display, 14mm
Accuracy	0.1% F.S. (±1 digit)
Conversion Rate	2.5 readings/second

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## DIMENSIONS & WIRING SCHEMATIC



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## OPTIONS

<b>12</b>	: Excitation 12 Vdc
<b>24</b>	: Excitation 24 Vdc
<b>4-20</b>	: Analog Output Current 4 to 20mA
<b>AL2</b>	: Two adjustable threshold levels by internal relay
<b>ABS</b>	: House in ABS Case

### Type of sensor

Wheatstone bridge sensors	
<b>D</b>	: Position sensor LVDT
<b>CD</b>	: Torquemeter type CD1140; CD9510
<b>G</b>	: Pressure sensor
<b>N</b>	: Potentiometric position sensor

## ORDERING INFO



### NORTH AMERICA

Measurement Specialties, Inc.  
1000 Lucas Way  
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Tel: 1-800-745-8008  
Fax: 1-757-766-4297  
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### ASIA

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