

# M905 Display



- Programmable Digital Display Meter
- Multiple output options available
- Casing mounted ABS in option

## DESCRIPTION

Measurement Specialties, Inc. offers comprehensive measurement solutions including electronic signal conditioning and display units.

The **M905** is an all-in-one digital meter, supplying the sensor with power and providing general purpose 4½ digit readout for strain gauge based transducers (mV, V) or process signals (mA, V). Standard features include a tare function, MAX/MIN value detection and storage, and a hold function. Optional relays and analogue outputs can be added to provide control outputs. The **RS232** or **RS485** option board allows communicating with PLC's or computers.

Through easy front panel or remote programming, the M905 adapts to a wide range of applications and works with most of Measurement Specialties, Inc.'s sensors. Additionally it can be mounted in an ABS case.

## FEATURES

- Suited for Process or Strain Gauge Type Sensors
- Display: -19999 to 19999
- Compact 96x48x60 mm Housing
- Front Panel Programming
- 11 point scaling
- Plug-in Option Boards

## 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 (L x W x H)	96 x 48 x 60 mm [3.9 x 1.9 x 2.4 in]
Panel Cut out	92 x 45 mm [3.6 x 1.8 in]
Operating Temperature Range	-10° C to 60° C [14 to 140° F]
Storage Temperature	-25° C to 85° C [-13 to 185° F]
Relative Humidity	<95% at 40° C [104° F]
Weight	160 g [0.35lb]
Mounting clips supplied	
Case Material	UL94 V-0 Polycarbonate
Front Panel Protection	IP65

### Electrical Characteristics

Operating power M905	85-265 Vac, 11-300Vdc
Optional M905-M6	10.5-70Vdc, 22-53 Vac
Consumption	5W w/o options, 8W max

### Display

Main Display	5 Digits, programmable colours (red, green, amber), 14mm high digits
Front Panel LEDs	4 threshold indicators, 4 function indicators [Tare, Peak, Valley, Hold]
Update Rate	20/s

### A/D Conversion

Resolution	±15bits
Read Rate	20/s

### Process/Potentiometric Signal Conditioning

Input	±10Vdc or ±20mA
Resolution	1µV
Input Impedance	1MΩ or 12.1Ω
Sensor Excitation	5, 10 Vdc or 24 Vdc

### Strain Gauge Signal Conditioning

Input	±15mV, ±30mV, ±150mV
Resolution	1µV
Input Impedance	100MΩ
Sensor Excitation	10Vdc

### Accuracy

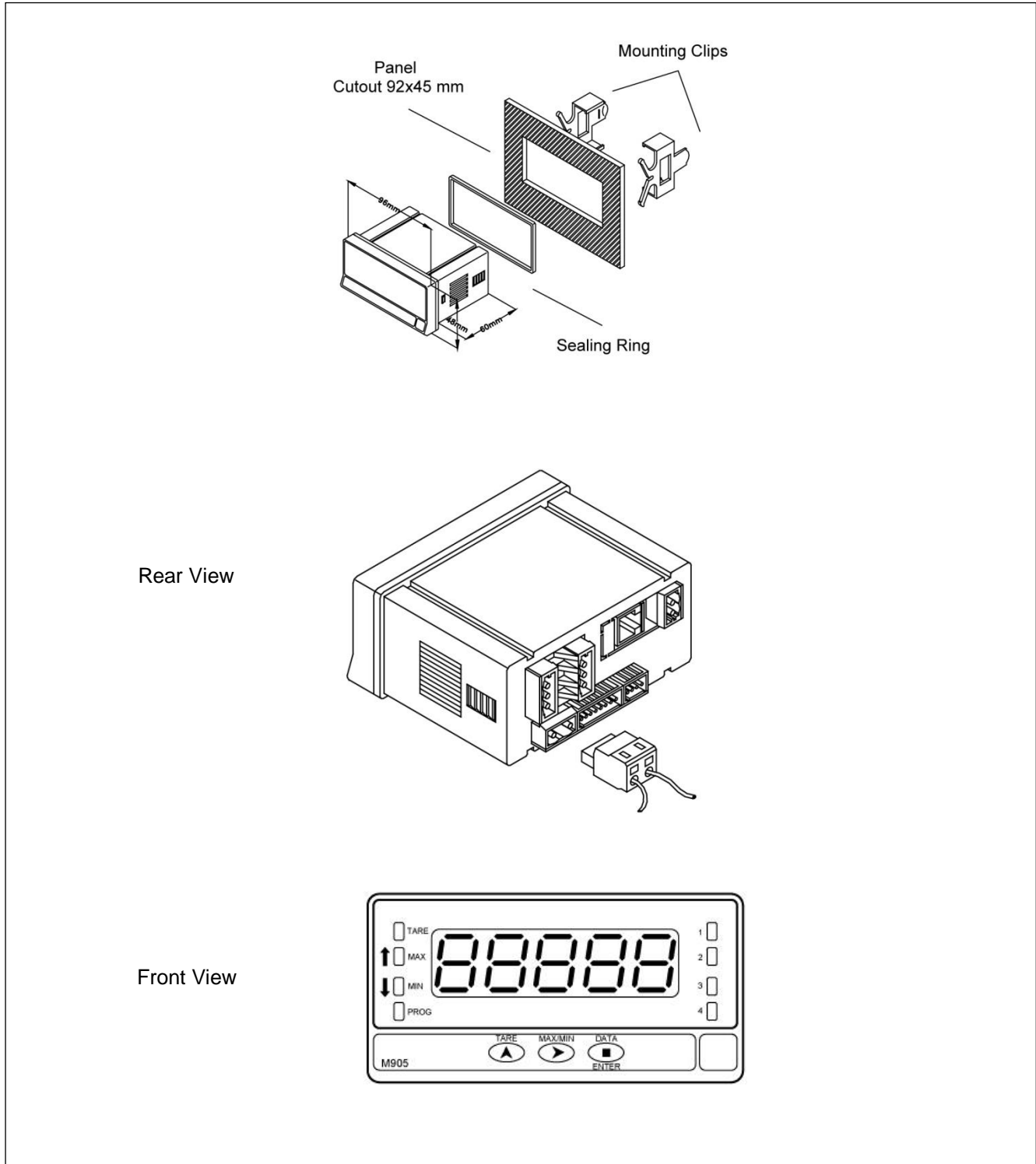
Temperature Coefficient	100ppm/° C
Warm Up Time	10min

### Standard Features

Tare	Accomplished by operating front panel key or remote programming
Peak Max/Min	Detection and storage since last reset
Hold	Hold the current display value
Reset	Back to default TARE and PEAK values
PC-Configurable	Software supplied on request with options RS2 or RS4

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## DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)

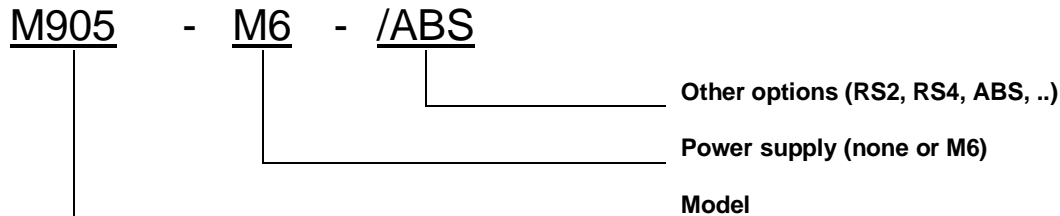


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## OPTIONS

<b>M6</b>	: Low Voltage
<b>NMV</b>	: Voltage output 0-10Vdc
<b>NMA</b>	: Current output 4/20mA
<b>2RE</b>	: 2 Threshold relays SPDT
<b>4RE</b>	: 4 Threshold relays SPST
<b>4OP</b>	: 4 NPN setpoint outputs
<b>4OPP</b>	: 4 PNP setpoint outputs
<b>RS2</b>	: RS232 interface
<b>RS4</b>	: RS485 interface
<b>ABS</b>	: Casing including front panel with on/off switch

## ORDERING INFO



## ACCESSORIES SUPPLIED WITH DEVICE

<b>ZELEACC001:</b> EU power cord
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## OPTIONAL ACCESSORIES

<b>ZELEACC002:</b> UK power cord
<b>ZELEACC003:</b> USA/CANADA power cord

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