

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

M905 Display

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

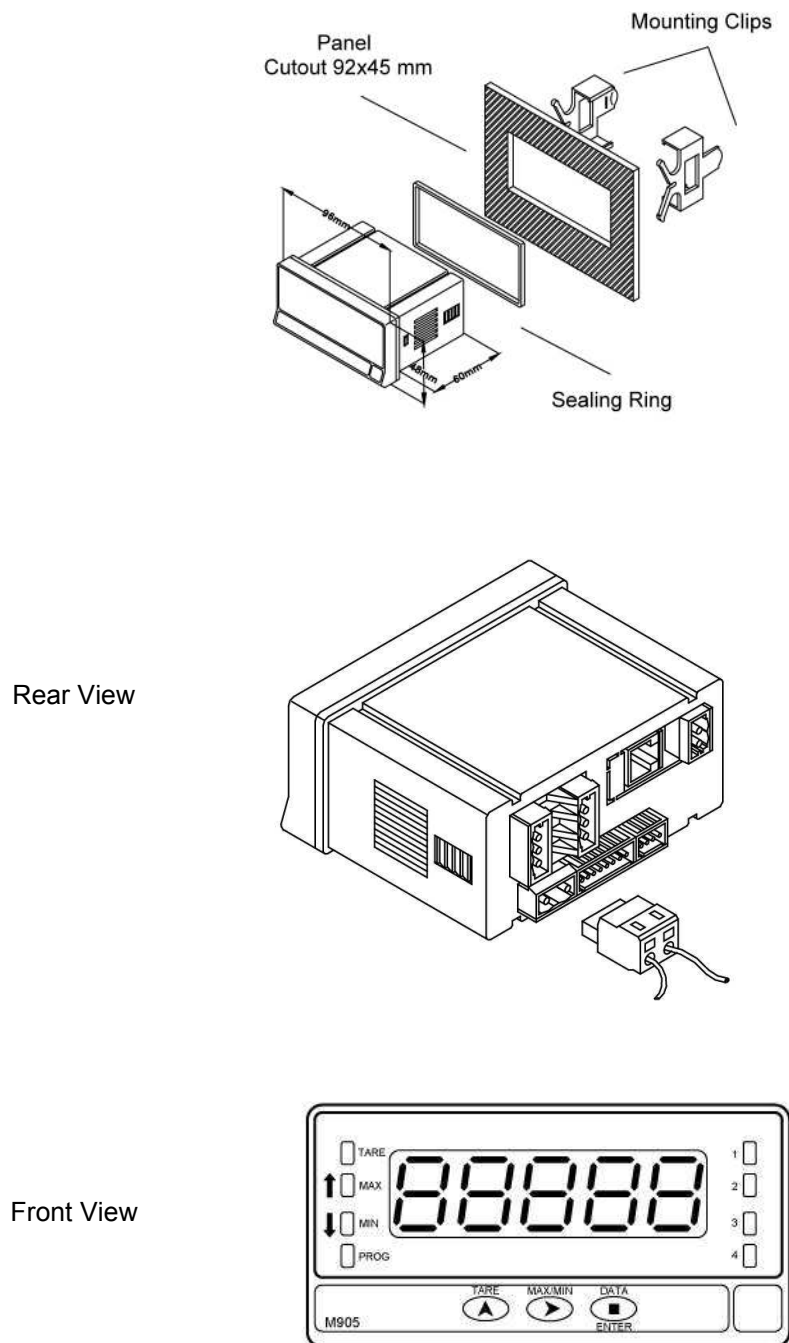
Temperature Coefficient	100ppm/° C
Warm Up Time	10min

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)



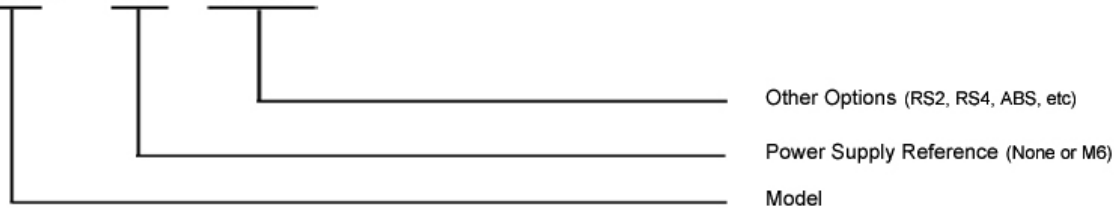
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OPTIONS

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

ORDERING INFO

M905 - M6 - /RS2



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