

# M-100 Series Miniature Digital Process Meter



Designed for Use with Thermocouples, RTDs, Potentiometers, Current and Voltage Output Sensors

The M-100 Series Single Channel Digital Process Meter was designed for applications where the temperature, voltage or current of the sensor's output needs to be displayed. This 16-bit, 4-digit LED display is simple to program; can be calibrated to read Fahrenheit, Celsius, Engineering units, Analog Voltage, Analog Current or Resistant. Easily mounts on 1/32 DIN. The M-100 comes standard with peak-hold functions, the ability to retransmit the analog signal to a control system or data logger, plus an internal relay for alarm.

## Features:

- 16-30 VDC Powered
- 1/32 DIN Mount
- 16-bit A/D Microprocessor
- Visible high set point LED alarm and relay output with an optional audible piezo buzzer alarm
- Case Dimensions: 1" x 2" x 3" (24 x 48 x 75 mm)
- Panel Dimensions: 1.77" x .87" (45 x 22 mm) (1/32 DIN)
- Process valve peak-hold capture function
- Screw terminal connections
- Max temperature peak-hold display capture capability
- Analog retransmission output

**Options:** Aluminum Enclosure / Audible Piezo Buzzer Alarm

## Technical Specifications:

Number of Inputs: 1  
Display Range: -1999 to +9999  
LED Display: Red, 4-digit, 0.275 inch ( 7 mm high)  
LED Display: 0.5 second  
Microprocessor Sample Rate: 4 samples/second  
Microprocessor A/D Resolution: 16-bit  
Accuracy:  $\pm .2\%$  FS  $\pm 1$  unit  
Environment: 0 to 50 C, 85% Max. RH (non-condensing)  
Operating Temperature: +32 to +125 F (0 to 50 C)  
Front Bezel Rating: IP51  
Power: 16 to 30 VDC  
Current Draw: < 100 mA @ 24 VDC  
Analog Retransmission Output: 0-20 mA, 4-20 mA, (0-5 VDC, 1-5 VDC with included 250 ohm resistor)

Alarm Relay Contact Rating: 1A @ 30 VDC  
Weight: 2.1 ounces

### Input Options

Thermocouple: K, T, J, R, S, E  
RTD: PT100, Cu50  
Resistance: 0-375 ohms  
mV (DC): 0-30mV  
Volts (DC): 0-5V, 1-5V, 0-10V  
mA (DC): 0-10 mA, 0-20 mA, 4-20 mA

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All specifications are subject to change without notice.

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