

M-100 Series Miniature Digital Process Meter

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

Digital Meter is designed for measurement applications that require displaying an analog sensor's high level output, or the output of most types of thermocouples. It offers a bright, 4–digit LED display with 16–bit resolution in a 1/32 DIN size that is easily mounted. It is very simple to program and can be calibrated to display an analog sensor's DC voltage or current output in engineering units, or temperature in degrees Fahrenheit or Celsius. The M–100 meter comes with peak–hold functions standard, along with internal relay contacts for set– point control of an alarm or annunciator. It also features the ability to retransmit a 4–20 mA analog signal to a control system or data logger. Although the M–100 is commonly panel mounted, an important option is the aluminum enclosure that makes the M–100 into a companion digital readout for Alliance Sensors Group's LV, ME, and MR Series linear position sensors.

Features:

- 16-30VDC 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
- Process valve peak-hold capture function
- Screw terminal connections
- Max temperature "Peak hold" display capture capability

Input Options:

RTD

K, T, J, R, S, E

0-5V, 1-5V, 0-10V

0-10mA, 0-20mA, 4-20mA

PT100. Cu50

0-375 ohms

0-30mV

Thermocouple

Resistance

mV (DC)

Volts (DC)

mA (DC)

- Analog retransmission output
- Optional protective aluminum enclosure

Technical Specifications:

Number of inputs 1

Display Range -1999 to +9999

LED Display Red, 4-digit, 0.275 inch (7mm high)

LED Display 0.5 second

Microprocessor sample rate 4 samples/second

Microprocessor A/D Resolution

Accuracy +/-.2% FS +/-1 unit

Environment 0 to 50C, 85% Max RH (non-condensing)

Operating Temperature +32 to +125°F (0 to 50C)

Front Bezel Rating IP51

ower 16 to 30 VDC

Current Draw < 100 mA @ 24VDC

Analog Retransmission Output 0-20mA, 4-20mA,

(0-5VDC, 1-5VDC with included 250ohm resistor)

Alarm Relay Contact Rating 1A @ 30VDC

Weight 2.1 Ounces

Case Dimensions 1 inch X 2 inch X 3inch (24 X 48 X 75mm)
Panel Cutout Dimensions 1.77" X .87" (45 X 22mm) (1/32 DIN)

Options:

Aluminum enclosure: Audible Piezo Buzzer Alarm:

ALLIANCE SENSORS GROUP

Alliance Sensors Group 102 Commerce Drive, Unit 8 Moorestown, New Jersey 08057 USA

Ph: 856-727-0250

www.alliancesensors.com info@alliancesensors.com