



## 2161 DC CURRENT METER

Used as a DC ammeter, this Digital Panel Meter (DPM) model provides a full-scale readout of  $\pm 20,000$  counts\* and four full-scale direct reading current ranges/resolutions (see Specifications). The 5.000-A range measures the IR drop across a built-in 10-m $\frac{1}{2}$  current shunt. Accuracy is 99.99% of full scale  $\pm 1$  count.

The model-numbering system is as follows:

Model Number	DC Current Range
2161-2	2.0000 mA
2161-20	20.000 mA
2161-200	200.00 mA
2161-5	5.000 A

All current ranges are calibrated at the factory, with calibration factors for each range stored in internal EEPROM. This allows ranges to be changed in the field without having to recalibrate the meter. As with all 2000 Series DPM's, the peak value of the input signal is automatically captured and may be displayed via front-panel push button or a control signal received at the rear connector (since the last meter reset). Data readings and outputs can be separately selected to be either filtered or unfiltered. See Digital Panel Meters (DPM's) for a full description of these and other standard DPM features.

2000 Series options applying to the DC voltage meter include:

- **Isolated Relay Outputs: Dual 10-Amp Contact Relays or Dual Solid-State Relays**
- **Isolated Analog Output: Isolated 0-20 mA and 0-10 mV**
- **RS232 or RS485 Interface: Communication via 4 or 6 conductor phone cable RJ-11**
- **Low AC/DC Power: 9-32 VDC, 8-28 VAC**

# PANEL METER

DC VOLTAGE METER  
[2000 SERIES]

## SPECIFICATIONS

### Current Input Ranges:

Range	Resolution	Input Ohms	Error $\pm 1$ Count
2.0000 mA	0.1 $\mu$ A	100 $\Omega$	0.01% FS
20.000 mA	1 $\mu$ A	10 $\Omega$	0.01% FS
200.00 mA	10 $\mu$ V	1 $\Omega$	0.01% FS
5.000 A	1 mA	0.01 $\Omega$	0.04% FS

**Span Temperature Coefficient:**  $\pm 0.003\%$  of reading/ $^{\circ}$ C

**Zero Temperature Coefficient:** 0.1 counts/ $^{\circ}$ C

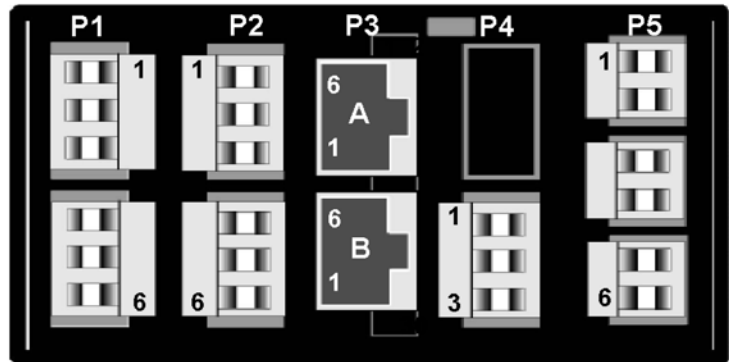
**Normal-Mode Rejection at 50/60 Hz:** 90 dB with minimum digital filtering

**Common-Mode Rejection from DC to 60 Hz:** 130 dB

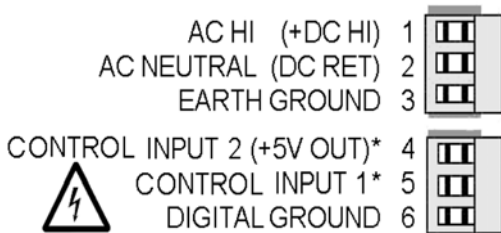
**Overcurrent Protection:** 25x for 2 mA, 8x for 20 mA, 2.5x for 200 mA, 1x for 5 A

## CONNECTORS

Connectors for signal and power are U/L rated screw-clamp terminal blocks that plug into mating jacks on the printed circuit board. Communication connectors are a single RJ11 plug for RS232, dual RJ11 plugs for RS485, dual RJ45 plugs for RS485 Modbus, and a 30-pin, mass termination connector for parallel BCD.



### P1 - POWER AND DIGITAL CONTROLS



### DC & PROCESS

