



2160 DC VOLTAGE METER

Used as a direct-reading DC voltmeter, this Digital Panel Meter (DPM) model provides a full-scale readout of $\pm 20,000$ counts* and five full-scale voltage ranges/resolutions (see Specifications). Accuracy is 99.99% of full scale ± 1 count. To minimize the load on the voltage signal, a high input impedance is provided (up to $1\text{ G}\frac{1}{2}$ for the 200.00- mV and 2.000-V ranges). The maximum voltage which can be applied on the 20, 200, and 660 V-DC range is 660 V-AC.

The model-numbering system is as follows:

Model Number	DC Voltage Range
2160-002	200.00 mV
2160-2	2.0000 V
2160-20	20.000 V
2160-200	200.00 V
2160-660	660.0 V

The meter can be used with external current shunts, which typically produce 50 mV or 100 mV at their rated maximum current. Scaling from millivolts to amperes for a specific shunt is easily accomplished from the front panel of the meter. The scalable readout is five full digits up to $\pm 99,999$ counts. Since the voltage signal from a current shunt can be noisy, the meter provides a selectable, adaptive moving average digital filter (see Digital Panel Meters (DPM's)).

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

Voltage Input Ranges:

Range	Resolution	Input Ohms	Error ± 1 Count
200.00 mV	10 μ V	1 G Ω	0.01% FS
2.0000 V	100 μ V	1 G Ω	0.01% FS
20.000 V	1 mV	1 M Ω	0.01% FS
200.00 V	10 mV	1 M Ω	0.01% FS
660.0 V	100 mV	1 M Ω	0.03% FS

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

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

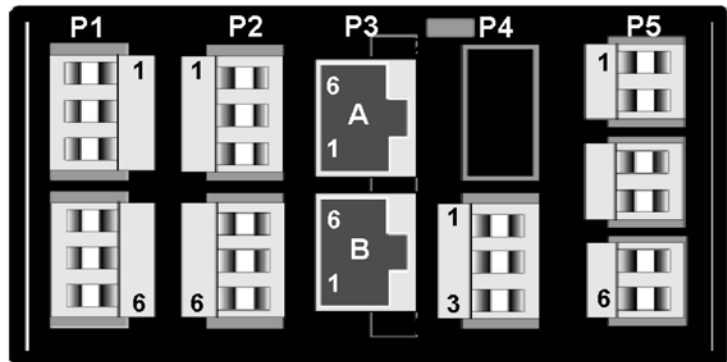
Normal-Mode Rejection at 50/60 Hz: 90 dB with minimum digital filtering

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

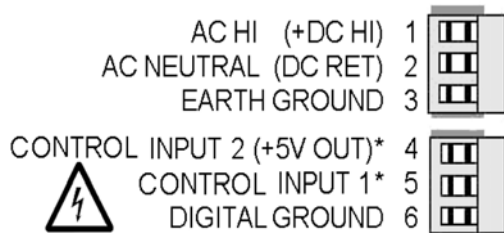
Maximum Applied Voltage: 660 V-AC for 20, 200, and 660 V ranges; 125 V-AC for other ranges

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

