The PD digital panel meter is a low cost solution to a wide range of monitoring and control applications. By simple front panel push-button setup, one meter with a DC signal conditioner can be programmed to display DC voltage, current, strain gauges or process signals. The temperature signal conditioner allows the user to select between 6 popular thermocouples or 2 RTD types. All at the price of a single function meter! Plug-in signal conditioners for AC (True RMS) voltage and current or low level load cells are available.

Input signals may be displayed as voltage or current, or scaled five full digits from 0 to 99,999 to read directly in engineering units, such as ft./lbs, rpm, psi, etc. No calibration equipment is required when changing ranges; all ranges are digitally pre-calibrated at the factory. Temperature scales (Celsius or Fahrenheit) are selectable from the front panel.

The PD digital panel meter makes 60 readings per second (50 for 50Hz operation) for fast control response, true peak reading capability and an analog output that accurately tracks the signal input. The meter has an adaptive digital filter that can automatically select the best time constant for minimum noise, but yet responds rapidly to an actual change in signal level. The peak value of the input signal can be displayed by a push of a button on the front panel. Auto tare allows the meter display to be set to zero for any input signal level.

The PD provides an isolated 5, 10 or 24VDC output to power strain gauges and transmitters, eliminating the need for an external supply. The meter has two alarm indicators with the set points programmed by front panel push-button. Transistors or dual 10 amp relays may be included to provide control outputs. The output can be set to operate above or below the set point and in a latched or non-latching mode.

0 to 10V and 0 to 20mA analog outputs are available to drive chart recorders, remote displays or for transmission to a central control room. The outputs are scaled through the front panel push-button. Adding RS-232 or RS-485 enables the PD to communicate with PLC's or computers. Baud rates can be set from 300 to 19,200. Software provided by Process Instrument Company with these options makes meter setup even easier. Tri-state parallel BCD outputs are also available.
**SPECIFICATIONS**

Display
- Type: 5 LED, 7-segment, 14.2mm (.56”) high digits and 3 LED indicators
- Color: Red or green

Range: -99999 to +99999

A to D Conversion Technique (Pat. 5,262,780) ..... Concurrent Slope
- Rate: 60/s at 60Hz operation
- 50/s at 50Hz operation
- Output Update Rate: 56/s at 60Hz
- 47/s at 50Hz
- Display Update Rate: 3.5/s at 60Hz
- 3/s at 50Hz

Accuracy at 25°C
- DC Volts, Amps, Ratio: 0.01%FS +/-1 Ct
- Thermocouple: 0.3°C maximum error
- RTD: 0.06°C maximum error
- True RMS (1 to 100%) ..... 0.1%FS, 10Hz to 10kHz
- Load Cell Meter: 0.003% of reading/C
- Span Tempco: 0.1 Cts./C
- Reference Junction: 0.03 degree/degree
- Noise Rejection
  - CMV from DC to 60Hz: Safety-rated to 250V AC, 4.2kVp her High Voltage Test
  - CMR from DC to 60Hz: 130dB
  - NMR to 50/60Hz Line: 90dB with minimum filtering

Environmental
- Operating Temperature: 0°C to 55°C
- Storage Temperature: -40°C to 85°C
- Relative Humidity: 95% at 40°C, noncondensing
- NEMA4X: when mounted in panel

Operating Power
- Voltage (std.): 85 to 264VAC, 90 to 370VDC
- Voltage (opt.): 8 to 28VAC, 9 to 37VDC
- Frequency: DC and 47 to 440Hz

Excitation Power Supplies
- Outputs: 5VDC, 5%, 100mA max.
- 10VDC, 5%, 120mA max.
- 24VDC, 5%, 50mA max.

**DISPLAY COLOR**
- 1: Green
- 2: Red

**POWER INPUT**
- 0: 90-260V AC
- 1: 9-32V DC

**ALARM OUTPUT**
- 0: None
- 1: 2 Ea. 10A Relay
- 2: Open Collector XTR.

**ANALOG OUTPUT**
- 0: None
- 1: 0-20mA, 0-10VDC

**DIGITAL INTERFACE**
- 0: None
- 1: RS-232C
- 2: RS-485
- 3: BCD

**ORDERING INFORMATION (04/2013)**

<table>
<thead>
<tr>
<th>DISPLAY COLOR</th>
<th>POWER INPUT</th>
<th>ALARM OUTPUT</th>
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**ANALOG VDC INPUT (F.S.)**
- DCV1: 200mVDC
- DCV2: 2VDC
- DCV3: 20VDC
- DCV4: 200VDC
- DCV5: 660VDC

**ADC**
- DCA1: 2mA
- DCA2: 20mA
- DCA3: 200mA
- DCA4: 5AMPS

**RTD (100Ω PT100)**
- P385C: -200 to 760°C
- P385F: -330 to 1560°F
- P392C: -200 to 850°C
- P392F: -330 to 1560°F

**TC (THERMOCOUPLE)**
- JC: -210 to 760°C
- JF: -347 to 1400°F
- KC: -244 to 1372°C
- KF: -408 to 2500°F
- TC: -257 to 400°C
- TF: -430 to 752°F
- EC: -240 to 1000°C
- EF: -400 to 1830°F
- SC: -46 to 1766°C
- SF: -51 to 3214°F
- RC: -45 to 1768°C
- RF: -48 to 3213°F

**PROCESS SIGNAL**
- P: 4-20mA
- P1: Custom (Specify)

**STRAIN-GAGE (4 Wire Ratio)**
- SG: 0-200mV = 0-20,000
- SGI: Custom (Specify)

**RMS VOLTS**
- RMV1: 200mV
- RMV2: 2V
- RMV3: 20V
- RMV4: 200V
- RMV5: 660V

**RMS AMPS**
- RMA1: 2mA
- RMA2: 20mA
- RMA3: 200mA
- RMA4: 5AMPS