**Low Cost Bargraph Meter**

For V/mADC Input And/Or RS-232C/485, Remote Displays

### DESCRIPTION:
Precision Instruments new PM series of Low Cost Bargraph meters complement the extensive and proven instrumentation line of Intelligent Programmable Controllers. We have applied our expertise to bring you the industry’s first low cost bargraph. **The PM1** offers eight (8) digits, seven-segment 0.6" display with limited alpha characters and 0-9 numerals plus decimal points. **The PM2** has 51 segments (2% resolution & 2 digits(1%)). **The PM3** gives you 1% resolution with its 101 segment high intensity bargraph & 2 digit displays. **Whichever** you choose for your application, you can depend on its quality and Precision Instruments 2 year warranty.

### APPLICATIONS:
(See Note 2)
- Remote Display for RS-232/485
- Process Meter (4-20mA/0-5VDC)
- Trend Indicator
- Inclinometer Indicator
- Well Depth
- Distance
- Position
- Altitude
- Temperature
- Pressure
- Flow
- Humidity
- pH
- RPM
- Strokes Per Hour/Per Minute

### MODEL PM

#### PM1
- 8 DIGITS
- 7 SEGMENTS

#### PM2
- 2 DIGITS & 51 SEGMENTS

#### PM3 Horizontal Version
- (Center Zero Available)

### ORDERING INFORMATION
(04/2013)

#### PM-1
- **SERIAL I/O**
  - 0 ............... None
  - 1 ............... RS232C
  - 2 ............... RS485
  - 9 ............... Custom

- **SIGNAL INPUT**
  - 0 ............... None
  - 9 ............... Custom
  (Serial Input Remote Display)

- **POWER INPUT**
  - 0 ............... 5VDC
  - 1 ............... 10-32VDC
  - 2 ............... 90-265VAC
  - 9 ............... Custom

#### PM-2
- **SERIAL I/O**
  - 0 ............... None
  - 1 ............... RS232C
  - 2 ............... RS485
  - 9 ............... Custom

- **SIGNAL INPUT**
  - 0 ............... None
  - 3 ............... 4-20mA/ADC
  - 4 ............... 5VDC
  - 9 ............... Custom

- **POWER INPUT**
  - 0 ............... 5VDC
  - 1 ............... 10-32VDC
  - 2 ............... 90-265VAC
  - 9 ............... Custom

#### PM-3
- **SERIAL I/O**
  - 0 ............... None
  - 1 ............... RS232C
  - 2 ............... RS485
  - 9 ............... Custom

- **SIGNAL INPUT**
  - 3 ............... 4-20mA/ADC
  - 4 ............... 5VDC
  - 9 ............... Custom

- **POWER INPUT**
  - 0 ............... 5VDC
  - 1 ............... 10-32VDC
  - 2 ............... 90-265VAC
  - 9 ............... Custom

- **MOUNTING**
  - Vertical
  - Horizontal
MECHANICAL INFORMATION

TYPICAL CONNECTIONS  (All Models)

Notes:
1. Refer to your specific model# before making connections
2. Always apply power before signal
3. 5VDC ±5% (0.25V) at connector
4. Notice terminal orientation before connecting

<table>
<thead>
<tr>
<th>Terminal #</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Dig. Gnd.</td>
<td>RS-232C &amp; Digital Signal Ground</td>
</tr>
<tr>
<td>9</td>
<td>Int 0</td>
<td>Do Not Connect Reserved for Custom</td>
</tr>
<tr>
<td>8</td>
<td>T 0</td>
<td>Default Control</td>
</tr>
<tr>
<td>7</td>
<td>RXD/DO</td>
<td>Receive Data (RS-232C/485)</td>
</tr>
<tr>
<td>6</td>
<td>TXD/DO</td>
<td>Transmit Data (RS-232C/485)</td>
</tr>
<tr>
<td>5</td>
<td>Hi Pulse In</td>
<td>+Digital Signal Input or Contact</td>
</tr>
<tr>
<td>4</td>
<td>+Signal In</td>
<td>+Digital Signal Input</td>
</tr>
<tr>
<td>3</td>
<td>-Signal In or Low Pulse In</td>
<td>Internal Instrument Ground for Analog, Inputs</td>
</tr>
<tr>
<td>2</td>
<td>+Power In</td>
<td>+For VDC or AC High Input</td>
</tr>
<tr>
<td>1</td>
<td>-Power In</td>
<td>Gnd. for VDC or AC Low Power In</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>PM-1</th>
<th>PM-2</th>
<th>PM-3</th>
</tr>
</thead>
<tbody>
<tr>
<td># Segments</td>
<td>None</td>
<td>Eight (8)</td>
<td>Two (2)</td>
</tr>
<tr>
<td># Digits</td>
<td></td>
<td>Two (2)</td>
<td>Two (2)</td>
</tr>
<tr>
<td>Analog Input Accuracy</td>
<td>±1%</td>
<td>±0.1%</td>
<td></td>
</tr>
<tr>
<td>Analog Input Resolution</td>
<td>1% (1 in 100)</td>
<td>±1% (1 in 100)</td>
<td></td>
</tr>
<tr>
<td>Polarity</td>
<td>Unipolar</td>
<td>Unipolar</td>
<td></td>
</tr>
<tr>
<td>Zero &amp; Span</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Input Impedance mA/VDC</td>
<td>200Ω/100KΩ</td>
<td>200Ω/100KΩ</td>
<td></td>
</tr>
<tr>
<td>Serial I/O</td>
<td>RS-232C/RS485</td>
<td>RS-232C/RS485</td>
<td>RS-232C/RS485</td>
</tr>
<tr>
<td>Characters</td>
<td>ASCII</td>
<td>ASCII</td>
<td>ASCII</td>
</tr>
<tr>
<td>Baud Rate</td>
<td>9600 Std.</td>
<td>9600 Std.</td>
<td>9600 Std.</td>
</tr>
<tr>
<td>Address Selection</td>
<td>Via Serial Port</td>
<td>Via Serial Port</td>
<td>Via Serial Port</td>
</tr>
<tr>
<td>Power Req't @5VDC</td>
<td>2 W</td>
<td>1 W</td>
<td>2 W</td>
</tr>
<tr>
<td>Power Input Non-isolated</td>
<td>5VDC±5%</td>
<td>5VDC±5%</td>
<td>5VDC±5%</td>
</tr>
<tr>
<td>Power Input Isolated</td>
<td>10-32VDC (or 24VAC)</td>
<td>10-32VDC (or 24VAC)</td>
<td>10-32VDC (or 24VAC)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0-60°C</td>
<td>0-60°C</td>
<td>0-60°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 70°C</td>
<td>-20 to 70°C</td>
<td>-20 to 70°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>5-95% N.C.</td>
<td>5-95% N.C.</td>
<td>5-95% N.C.</td>
</tr>
<tr>
<td>MTBF (Calculated)</td>
<td>100,000Hrs</td>
<td>100,000Hrs</td>
<td>100,000Hrs</td>
</tr>
<tr>
<td>Front Panel</td>
<td>NEMA 4</td>
<td>NEMA 4</td>
<td>NEMA 4</td>
</tr>
<tr>
<td>Weight</td>
<td>3 oz. (84g.)</td>
<td>3 oz. (84g.)</td>
<td>3 oz. (84g.)</td>
</tr>
</tbody>
</table>

* Specifications Subject to Change Without Notice! Contact Precision Instrument Company for Your Custom Needs!!