Digital Panel Meters - DPM1 Series 1/32 DIN

These models in the ProSense DPM1 series offers a simple, low cost digital display of temperature in either Fahrenheit or Celsius from RTD or Thermocouple temperature sensors. The 4-digit red LED display is pre-configured for fixed temperature ranges based on the type of temperature sensor input. Thermocouples are displayed with 1 degree of resolution while RTDs can be displayed with either 0.1 or 1 degree of resolution. The meter is powered from an external AC or DC power supply. The 1/32 DIN housing takes up minimal panel space and the meter face has an IP65 rating. Configuration parameters can be locked out to prevent unauthorized or accidental changes to the meter’s operation. ProSense digital panel meters are backed by a 3 year warranty.

Features:
- 48 x 24mm 1/32 DIN
- Simple menu driven pushbutton configuration
- 10mm 4-digit red LED display
- Temperature, °F or °C
- RTD: Pt100, Resolution: 1°, 0.1°
- TC: J, K, T, N, Resolution: 1°
- AC or DC powered
- Total configuration lock out
- 3 year warranty

### DPM1 Series Panel Meters

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Weight (lbs)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM1-T-H</td>
<td>ProSense digital panel meter, 1/32 DIN, 4-digit red LED, input thermocouple type(s): J, K, T, N, input RTD type(s): Pt100, 85 to 265 VAC / 100 to 300 VDC operating voltage.</td>
<td>0.2</td>
<td>$91.00</td>
</tr>
<tr>
<td>DPM1-T-L</td>
<td>ProSense digital panel meter, 1/32 DIN, 4-digit red LED, input thermocouple type(s): J, K, T, N, input RTD type(s): Pt100, 21 to 53 VAC / 10.5 to 70 VDC operating voltage.</td>
<td>0.2</td>
<td>$91.00</td>
</tr>
</tbody>
</table>

### Technical Specifications

#### Input / Resolution / Fixed Display Range

<table>
<thead>
<tr>
<th>Type</th>
<th>Resolution 1°</th>
<th>Resolution 0.1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD: Pt100 (3-wire)</td>
<td>-200 to 800°C</td>
<td>-199.9 to 800.0°C</td>
</tr>
<tr>
<td>TC &quot;J&quot;</td>
<td>-200 to 1100°C</td>
<td>-199.9 to 1099.9°F</td>
</tr>
<tr>
<td>TC &quot;K&quot;</td>
<td>-200 to 1500°C</td>
<td>-199.9 to 1499.9°F</td>
</tr>
<tr>
<td>TC &quot;T&quot;</td>
<td>-200 to 400°C</td>
<td>-199.9 to 399.9°F</td>
</tr>
<tr>
<td>TC &quot;N&quot;</td>
<td>-200 to 1500°C</td>
<td>-199.9 to 1499.9°F</td>
</tr>
</tbody>
</table>

#### TC Cold Junction Compensation Range

-10°C to 60°C (14°F to 140°F)

#### Pi100 Measuring Current

1mA

#### Pi100 Linearization (ε=0.00385)

IEC 60751

#### Pi100 Max. Lead Resistance

4Ω / wire (balanced)

#### Accuracy

- Pt100 1°: ε(0.2°rdg + 1°C) / (ε0.2°rdg + 2°F); ε50°C/50°F ε1%rdg+1°C / ε1%rdg+2°F
- Pt100 0.1°: ε(0.2°rdg + 0.4°C) / (ε0.2°rdg + 0.7°F); ε50°C/50°F ε1%rdg+0.4°C / ε1%rdg+0.7°F
- TC J, K, T, N: ε(0.4°rdg + 2°C) / (ε0.4°rdg + 4°F); ε50°C/50°F ε1%rdg+2°C / ε1%rdg+4°F

#### Accuracy Conditions

- Temperature coefficient: 100 ppm/°C
- Warm up time: 10 minutes
- Temperature: 23°C ±5°C

#### Power Supply and Fuses

- DPM1-T-H: 85-265VAC 50/60Hz or 100-300VDC (Recommended fusing, 0.1A/250V, 5mm x 20mm glass miniature or DIN 41661 equivalent)
- DPM1-T-L: 21-53VAC 50/60Hz or 10.5-70VDC (Recommended fusing, 0.5A/250V, 5mm x 20mm glass miniature or DIN 41661 equivalent)

#### Power Consumption

1.8W

#### Conversion

- Technique: Sigma-Delta
- Resolution: ±15 bits
- Conversion rate: 25 times per second
- Range: -1999 to 9999

#### Display

- Type: 4-digit 10mm (0.4"), red
- Display refresh rate: 4 times per second
- Display/input overrange indication: αE

#### Environmental Conditions

- Operating temperature: -10°C to +60°C (14°F to 140°F)
- Storage temperature: -25°C to +85°C (13°F to 185°F)
- Relative humidity (non condensing): -95% @ 40°C (104°F)
- Maximum altitude: 2000m
- Frontal protection degree: IP65

#### Environmental Air

No corrosive gases permitted

#### Agency Approvals

CE

For the latest prices, please check AutomationDirect.com.
Wiring

CN1 and CN2 Terminals

Insertion Tool (included with meter)

Insert wires into the proper terminal while using the insertion tool to open the clip inside the connector. Release the insertion tool to fix wire to the terminal.

Dimensions

mm [inches]

Installation

See our website www.AutomationDirect.com for complete Engineering drawings.

Scan or click the above QR code to be taken to the DPM1-T-H and DPM1-T-L Series Quick Start Guide

Insert
## Description

The ProSense DPM family of digital panel meters includes both 1/32 DIN and 1/8 DIN meter sizes with simple menu-driven pushbutton configuration. A wide variety of input signals can be accepted for process, temperature, load cell, and other applications. Available output options include alarm relays, analog signal retransmission, and sensor excitation voltage. Backed by a 3-year warranty, ProSense digital panel meters offer outstanding features and performance at an incredible price point.

* Illumination based on available loop current and will not be as bright as the powered Digital Panel Meters

## DPM Series Digital Panel Meters Selection Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Display</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Power</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM1-A-LP</td>
<td>1/32 DIN</td>
<td>Red LED*, -1999 to 9999</td>
<td>4-20mA</td>
<td>None</td>
<td>Loop Powered</td>
<td>$70.00</td>
</tr>
<tr>
<td>DPM1-A-H</td>
<td></td>
<td>Selectable decimal point</td>
<td>±20mA, ±100mV, ±10V, ±20V</td>
<td></td>
<td>85-265VAC, 50/60 Hz, 100-300VDC</td>
<td>$91.00</td>
</tr>
<tr>
<td>DPM1-A-L</td>
<td></td>
<td>Red LED</td>
<td>RTD Pt100 (3-wire)</td>
<td>TC Type J, K, T or N</td>
<td>21-53VAC 50/60 Hz, 10.5-70VDC</td>
<td>$91.00</td>
</tr>
<tr>
<td>DPM1-T-H</td>
<td>1/32 DIN</td>
<td>Red LED, -1999 to 9999</td>
<td>None</td>
<td></td>
<td>85-265VAC, 50/60 Hz, 100-300VDC</td>
<td>$91.00</td>
</tr>
<tr>
<td>DPM1-T-L</td>
<td>1/32 DIN</td>
<td>Red LED, -1999 to 9999</td>
<td>None</td>
<td></td>
<td>21-53VAC 50/60 Hz, 10.5-70VDC</td>
<td>$91.00</td>
</tr>
<tr>
<td>DPM1-A-2R-H</td>
<td></td>
<td>Selectable decimal point</td>
<td>±20mA, ±100mV, ±10V, ±60V</td>
<td>2 Relays Form A SPDT Normally Open</td>
<td>85-265VAC, 50/60 Hz, 100-300VDC</td>
<td>$101.00</td>
</tr>
<tr>
<td>DPM1-A-2R-L</td>
<td>1/32 DIN</td>
<td>Red LED</td>
<td>RTD Pt100 (3-wire)</td>
<td>TC Type J, K, T or N</td>
<td>21-53VAC 50/60 Hz, 10.5-70VDC</td>
<td>$101.00</td>
</tr>
<tr>
<td>DPM2-AT-HL</td>
<td>1/8 DIN</td>
<td>Red LED, -9999 to 39999</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>2 Relays Form C SPDT</td>
<td>20-265VAC 50/60 Hz, 11-265VDC, 10.5-70VDC</td>
<td>$117.00</td>
</tr>
<tr>
<td>DPM3-AT-H</td>
<td></td>
<td>Selectable decimal point</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>2 Relays Form A SPDT Normally Open</td>
<td>85-265VAC, 50/80Hz, 100-300VDC</td>
<td>$133.00</td>
</tr>
<tr>
<td>DPM3-AT-2R-H</td>
<td>1/8 DIN</td>
<td>Red, Green, Amber LED</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>None</td>
<td>4-20mA, 2 Relays Form C SPDT, 4-20mA</td>
<td>$149.00</td>
</tr>
<tr>
<td>DPM3-AT-AH</td>
<td>1/8 DIN</td>
<td>Selectable decimal point</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>2 Relays Form C SPDT, 4-20mA</td>
<td>85-265VAC, 50/80Hz, 100-300VDC</td>
<td>$166.00</td>
</tr>
<tr>
<td>DPM3-AT-A2R-H</td>
<td>1/8 DIN</td>
<td>Red, Green, Amber LED</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>4 Relays Form A SPDT Normally Open</td>
<td>22-53VAC 50/60 Hz, 10.5-70VDC</td>
<td>$161.00</td>
</tr>
<tr>
<td>DPM3-AT-L</td>
<td></td>
<td>Selectable decimal point</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>2 Relays Form C SPDT, 4-20mA</td>
<td>None</td>
<td>$133.00</td>
</tr>
<tr>
<td>DPM3-AT-2R-L</td>
<td></td>
<td>Selectable decimal point</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>4 Relays Form A SPDT Normally Open</td>
<td>2 Relays Form C SPDT, 4-20mA</td>
<td>$149.00</td>
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<td>DPM3-AT-A2L</td>
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<td>Selectable decimal point</td>
<td>±20mA, ±10V, ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire)</td>
<td>4 Relays Form A SPDT Normally Open</td>
<td>2 Relays Form C SPDT, 4-20mA</td>
<td>$149.00</td>
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For the latest prices, please check AutomationDirect.com.