

prosense® DPM3 Series Bar Graph Panel Meters



The ProSense DPM3-B-AT-A4R is a versatile 9/64 DIN panel-mount digital panel meter featuring a dual-display design with a 100mm 101-segment green LED bar graph and an 8mm 4-digit red LED numeric readout.

The units accept a wide range of input types including current (0–20 mA and 4–20 mA), voltage (mV and V ranges), RTD (JPT100Ω, Pt50Ω, Pt100Ω, and more), and thermocouple inputs (Types K, J, E, T, R, B, S, N, C, L, U, and Platinel II).

The meter includes four 1A SPST relay alarm outputs, each independently configurable for absolute high/low limit, sensor break, standard, latch, or standby sequence operation. An isolated DC 4–20 mA PV transmission output is also provided for retransmitting the

measured value to external devices with a load resistance of up to 600Ω.

Display functions include both full-bar and center-bar graph modes, with configurable high/low limit bar graph scales and alarm indicators that flash directly on the bar graph when an alarm condition is active.

The unit supports advanced input processing functions including linear, root, square, and two-unit (TUF) special functions, along with a moving-average digital filter adjustable from 1 to 16 samples.

Available in two power variants — 100–240 VAC (DPM3-B-AT-A4R-H) and 24 VDC (DPM3-B-AT-A4R-L) — both carry a 3-year warranty.



Features:

- Dual LED display — 100mm 101-segment green bar graph plus 8mm 4-digit red numeric display for simultaneous visual monitoring of process value and trend
- Universal input — accepts thermocouple (12 types), RTD (5 types), and analog current/voltage inputs, selectable via front-accessible input specification switch
- Four independent alarm outputs — 1A SPST relay outputs with configurable high/low limit, sensor break, latch, and standby sequence options, with alarm status reflected directly on the bar graph display
- Isolated 4–20 mA PV transmission output — retransmits the process value to downstream devices with scalable 4 mA and 20 mA output scale points and optional ±5% or ±10% range extension
- Advanced input processing — built-in special functions for linear, square root, square, and dual-unit (TUF) calculations, plus a 1–16 sample moving average digital filter for noise suppression
- Dual power supply options — available in 100–240 VAC (DPM3-B-AT-A4R-H) or 24 VDC (DPM3-B-AT-A4R-L) to suit a wide range of panel environments
- Non-volatile memory with parameter lock — retains settings with two-level lock (LOC1/LOC2) to prevent unauthorized parameter changes

DPM3 Series Bar Graph Panel Meters

Model	Description	Weight (lb)	Drawing Links	Price
<u>DPM3-B-AT-A4R-H</u>	ProSense digital panel meter, panel mount, 9/64 DIN, 100mm 101-segment bar graph (green) LED and 8mm 4-digit (red) LED, current, voltage, RTD or thermocouple input, 4–20 mA, (4) 1A SPST relays output, 100–240 VAC operating voltage.	0.73	PDF	\$335.00
<u>DPM3-B-AT-A4R-L</u>	ProSense digital panel meter, panel mount, 9/64 DIN, 100mm 101-segment bar graph (green) LED and 8mm 4-digit (red) LED, current, voltage, RTD or thermocouple input, 4–20 mA, (4) 1A SPST relays output, 24 VDC operating voltage.	0.73	PDF	\$335.00

Quick Start Guide



Scan or click the above QR code to open the Quick Start Guide

Manual



Scan or click the above QR code to open the Manual

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Technical Specifications		
Model	<u>DPM3-B-AT-A4R-H</u>	<u>DPM3-B-AT-A4R-L</u>
Power Supply	100–240 VAC, 50/60 Hz	24 VDC
Permissible Voltage Range	90–110% of rated voltage	
Power Consumption	≤ 6 VA	≤ 4W
Sampling Period	• TC, RTD: 250 ms • Analog: 100 ms	
Digital Input	Contact	• ON: ≤ 2 kΩ • OFF: ≥ 90 kΩ
	Non-Contact	• Residual voltage: ≤ 1.0V • Leakage current: ≤ 0.03 mA
	Input Sensing	≈ 0.2 mA
Option Output	Alarm	4 point relay: 250 VAC, 1A (Form A) SPST normally open
	PV Trans.	Isolated DC 4–20 mA (Load resistance: ≤ 600Ω)
Display Type	7-segment (red), Bar graph (green)	
Alarm Output Hysteresis	1–999 digits	
Relay Life Cycle	Mechanical	4 point: ≥ 20,000,000 operations
	Electrical	4 point: ≥ 500,000 operations (resistive load: 250 VAC, 1A)
Dielectric Strength	Between the live parts and the case: 2,000 VAC~50/60 Hz for 1 min	
Vibration	0.75mm amplitude at frequency of 5–55 Hz in each X, Y, Z direction for 2 hours	
Insulation Resistance	≥ 100 MΩ (500 VDC megger)	
Noise Immunity	±2 kV square-shaped noise (pulse width 1 μs) by noise simulator	
Memory Retention	≈ 10 years (non-volatile semiconductor memory type)	
Ambient Temperature	-10 to +50 °C [-14 to +122 °F], storage: -20 to +60 °C [-4 to +140 °F] (no freezing or condensation)	
Ambient Humidity	35–85% RH, storage: 35–85% RH (no freezing or condensation)	
Panel Cutout	33mm x 140mm [1.29in x 5.51in]	
Certification	CE	

For additional information, see the Quick Start Guide or Manual.

Wiring Connections

