

pro^{sense}® Digital Panel Meters - DPM1 Series 1/32 DIN

These models in the ProSense DPM1 series offers a simple, low cost digital display of analog process and DC voltage signals. The 4-digit red LED display is easily scaled into any engineering units from -1999 to 9999 with a selectable decimal point location. Two point direct or reverse acting linear scaling values can be entered manually or by introducing actual sensed process values in Teach mode. 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
- 4 digit (-1999 to 9999) red LED display
- Selectable decimal point
- Process ($\pm 10V$, $\pm 20mA$, $\pm 100mV$)
- DC Voltage ($\pm 200V$, $\pm 20V$)
- AC or DC powered
- Display scaling or process teaching modes
- Configuration for direct or reverse acting linear processes
- Total configuration lock out
- 3 year warranty

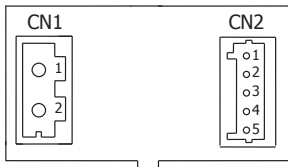


DPM1 Series Panel Meters			
Model	Description	Weight (lbs)	Price
DPM1-A-H	ProSense digital panel meter, 1/32 DIN, 4-digit red LED, input current signal range(s) of +/- 20 mA, input voltage signal range(s) of +/- 200 VDC, +/- 20 VDC, +/- 10 VDC, +/- 100 mVDC, 85 to 265 VAC / 100 to 300 VDC operating voltage.	0.2	\$85.00
DPM1-A-L	ProSense digital panel meter, 1/32 DIN, 4-digit red LED, input current signal range(s) of +/- 20 mA, input voltage signal range(s) of +/- 200 VDC, +/- 20 VDC, +/- 10 VDC, +/- 100 mVDC, 21 to 53 VAC / 10.5 to 70 VDC operating voltage.	0.2	\$85.00

Technical Specifications					
Input	Voltage				Current
	Range	$\pm 200V$ (fixed)	$\pm 20V$ (fixed)	$\pm 10V$	
Resolution	0.1V	0.01V	1mV	0.1mV	0.01mA
Input Impedance	Volts	1M Ω			
	mV	100M Ω			
	mA	20 Ω			
Accuracy (@ 23°C $\pm 5^\circ C$)	Maximum error	$\pm(0.1\%$ of reading +3 digits)			
	Temperature coefficient	100 ppm/ $^\circ C$			
	Warm-Up time	5 minutes			
Power Supply and Fuses	DPM1-A-H	85-265VAC 50/60Hz or 100-300VDC (Recommended fusing, 0.1A/250V, 5mm x 20mm glass miniature or DIN 41661 equivalent)			
	DPM1-A-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	20 times per second			
Display	Range	-1999 to 9999, selectable decimal point position			
	Type	4 digit 10mm (0.4"), red			
	Display refresh rate	4 times per second			
	Display/input overrange indication	$\square \omega E$			
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				

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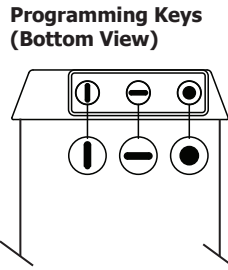
Wiring



CN1		DC Supply	
AC Supply		1	-VDC
1	Neutral	1	-VDC
2	Line	2	+VDC

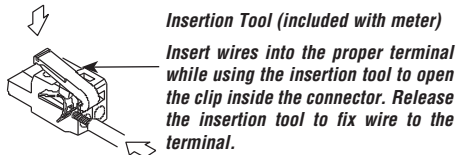
CN2	
1	- IN (common)
2	+100mV DC
3	+20mA
4	+10/20VDC
5	+200VDC

Terminals		
Connector	CN1	CN2
Wire cross section	0.08 to 2.5mm ² (28 to 12 AWG)	0.08 to 0.5mm ² (28 to 20 AWG)
Strip length	8 to 9mm	5 to 6mm
Manufacturer	Wago 231-202/026-000	Wago 733-105
Cage clamp connection	Insertion tool or screwdriver with 0.5 mm x 3.0 mm blade	Insertion tool or screwdriver with 0.3 mm x 1.8 mm blade

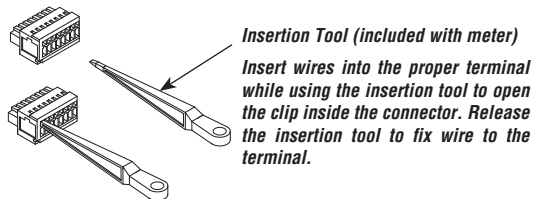


- **ENTER:** Enters configuration and validates data and parameters.
- **SHIFT:** Selects mode or shifts blinking digit in configuration.
- ⬆ **UP:** Increases value of blinking digit in configuration.

CN1 Terminals

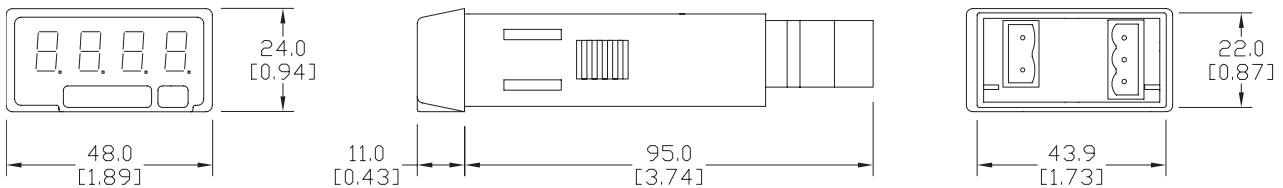


CN2 Terminals



Dimensions

mm [inches]



Installation	
Dimensions	48 x 24 x 95mm (1/32 DIN)
Panel Cutout	45 x 22mm (Max. panel thickness 7mm)
Case Material	Polycarbonate UL 94 V-0

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

For additional information and configuration details download the complete instructions from www.AutomationDirect.com

pro^{sense} Digital Panel Meters



Type DPM1-A-LP



Type DPM1-A-T



Type DPM1-A-2R



Type DPM2



Type DPM3

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.

Company Information

Drives

Soft Starters

Motors

Power Transmission

Motion: Servos and Steppers

Motor Controls

Sensors: Proximity

Sensors: Photoelectric

Sensors: Encoders

Sensors: Limit Switches

Sensors: Current

Sensors: Pressure

Sensors: Temperature

Sensors: Level

Sensors: Flow

Pushbuttons and Lights

Stacklights

Signal Devices

Process

Relays and Timers

Pneumatics: Air Prep

Pneumatics: Directional Control Valves

Pneumatics: Cylinders

Pneumatics: Tubing

Pneumatics: Air Fittings

Appendix Book 2

Terms and Conditions

DPM Series Digital Panel Meters Selection Guide

Model	Size	Display	Inputs	Outputs	Power	Price	
DPM1-A-LP	1/32 DIN	Red LED*, -1999 to 9999 Selectable decimal point	4-20mA	None	Loop Powered	\$65.00	
DPM1-A-H			±20mA, ±100mV		85-265VAC, 50/60 Hz 100-300VDC	\$85.00	
DPM1-A-L			±10V, ±20V ±200V		21-53VAC 50/60 Hz 10.5-70VDC	\$85.00	
DPM1-T-H		Red LED, -1999 to 9999	RTD Pt100 (3-wire) TC Type J, K, T or N		85-265VAC, 50/60 Hz 100-300VDC	\$85.00	
DPM1-T-L					21-53VAC 50/60 Hz 10.5-70VDC	\$85.00	
DPM1-A-2R-H		Red LED, -1999 to 9999 Selectable decimal point		±20mA, ±100mV ±10V, ±60V	2 Relays Form A SPST Normally Open	85-265VAC, 50/60 Hz 100-300VDC	\$95.00
DPM1-A-2R-L					2 Relays Form A SPST Normally Open 0/4-20mA	21-53VAC 50/60 Hz 10.5-70VDC	\$95.00
DPM1-A-A2R-H						85-265VAC, 50/60 Hz 100-300VDC	\$100.00
DPM1-A-A2R-L					21-53VAC 50/60 Hz 10.5-70VDC	\$100.00	
DPM2-AT-HL		Red LED, -9999 to 9999 Selectable decimal point	±20mA, ±10V ±200V, 100-100k Ohm potentiometer, 1k-50k Ohm resistance, RTD Pt100 (3-wire) RTD Pt1000 (4-wire) TC Type J, K, T or N	None	20-265VAC 50/60 Hz 11-265VDC	\$100.00	
DPM2-AT-2R-HL				2 Relays Form C SPDT		\$110.00	
DPM3-AT-H	1/8 DIN	Red, Green, Amber LED -19999 to 39999 Selectable decimal point	±20mA, ±10V RTD Pt100 (3-wire) TC Type J, K, T or N Load Cell ±15mV, ±30mV, ±150mV Potentiometer	None	85-265VAC 50/60Hz 100-300VDC	\$125.00	
DPM3-AT-2R-H				2 Relays Form C SPDT		\$140.00	
DPM3-AT-4R-H				4 Relays Form A Normally Open with shared common		\$150.00	
DPM3-AT-A-H				4-20mA	\$140.00		
DPM3-AT-A2R-H				2 Relays Form C SPDT 4-20mA	\$155.00		
DPM3-AT-L				None	\$125.00		
DPM3-AT-2R-L				2 Relays Form C SPDT	\$140.00		
DPM3-AT-4R-L				4 Relays Form A Normally Open with shared common	22-53VAC 50/60 Hz 10.5-70VDC	\$150.00	
DPM3-AT-A-L				4-20mA	\$140.00		
DPM3-AT-A2R-L				2 Relays Form C SPDT 4-20mA	\$140.00		

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