

DMS-20PC-1-LM

Self-Powered, 3 Digit, LED
AC Line Voltage Monitors

Features

- Plugs directly into USA-style wall outlets
- Screw terminals for panel mounting
- Small 1.38" x 0.88" x 1.0" packages
- Large, easy-to-read, red LED displays
- Fully encapsulated for harsh environments
- Half-wave averaging, rms calibrated
- UL, CSA and IEC1010-1 certified
- Very low cost!

Functional Specifications

Input

Voltage Range ①	85-264Vrms
Overvoltage Protection	300Vrms (Overvoltage category II)
Frequency Range ①	47-63Hz
Current Consumption	50mArms (max.)

Performance

Sampling Rate	2.5 readings/second
Measurement Type	Half-wave average, rms calibrated for sinusoidal input
Accuracy @ +25°C	±1V (typ.), ±2V (max.)
Temperature Drift (-25 to +60°C)	±0.15 Volts/°C (max.)

Mechanical

Dimensions	1.38" x 0.88" x 1.00"
Display Type	3 digit, red LED, 0.37"/9.4mm
Weight	1 ounce (28 grams)
Case Material	Polycarbonate

Environmental

Operating Temperature	-25 to +60°C
Storage Temperature	-40 to +75°C
Humidity (Non-condensing)	0 to 95%

① Operation and accuracy at inputs above or below these ranges are not specified.

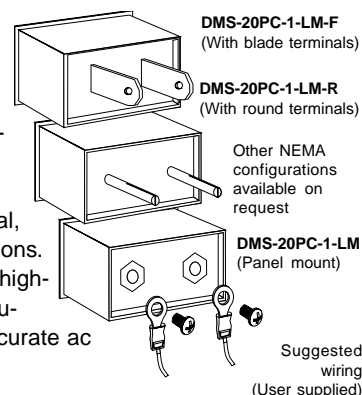
Ordering Information

DMS-20PC-1-LM	With threaded terminations and screws
DMS-20PC-1-LM-F	With blade terminals, factory installed
DMS-20PC-1-LM-R	With round terminals, factory installed
DMS-20-CP	Panel cutout punch
DMS-BZL3	Panel mount bezel
DMS-BZL4	Panel mount bezel with sealing gasket
Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with each meter	

DATEL's DMS-20PC-1-LM is a component-size, self-contained, low-cost ac voltmeter for true line measurements. It requires no additional components or auxiliary power. Simply plug it into any wall outlet and instantly read voltages from 85 to 264Vac (47-63Hz). The large (0.37"/9.4mm), bright red LED display makes the DMS-20PC-1-LM easily readable under any lighting conditions.

DMS-20PC-1-LM employs half-wave sinusoidal averaging (rms calibrated) and has a display resolution of 1Vac over its full input range. Packaged in a red-filter case with built-in bezel, the meter is fully encapsulated for ruggedness. All units are overvoltage protected to 300Vac.

This low-cost meter is ideal for industrial, laboratory, office and field-service applications. Its miniature size is perfect for design into high-end consumer electronics, laboratory instrumentation and other products requiring accurate ac line monitoring.



Mechanical Specifications

Dimensions in inches (millimeters)
Tolerances: 2 PL Dec ±0.02 (±0.51)
3 PL Dec ±0.010 (±0.254)
Recommended panel cutout dimensions:
1.336 (33.93)W x 0.838 (21.29)H
Internal corner radii 0.032 (0.81) Max.

