

Self-Powered 3 Digit, LED Display 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, blue or green 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 $\pm 1V$ (typ.), $\pm 2V$ (max.)

Temperature Drift

 $(-25 \text{ to } +60^{\circ}\text{C})$ $\pm 0.15 \text{ Volts/}^{\circ}\text{C (max.)}$

Mechanical

Dimensions 1.38" x 0.88" x 1.00" DisplayType 3 digit, red LED, 0.37"/9.4mm

Weight 1 ounce (28 grams)
Case Material Polycarbonate

Environmental

Operating Temperature -25 to $+60^{\circ}$ C Storage Temperature -40 to $+75^{\circ}$ 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-C
DMS-20PC-1-LM-B-C
DMS-20PC-1-LM-G-C
DMS-20PC-1-LM-F-C
DMS-20PC-1-LM-BF-C
DMS-20PC-1-LM-GF-C
DMS-20PC-1-LM-GF-C
DMS-20PC-1-LM-GF-C
DMS-20PC-1-LM-GF-C
DMS-20PC-1-LM-GF-C

DMS-20-CP Panel cutout punch
DMS-BZL3-C Panel mount bezel

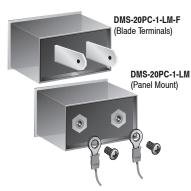
DMS-BZL4-C Panel mount bezel with sealing gasket

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, blue or green LED display makes the DMS-20PC-1-LM easily readable under any lighting conditions.

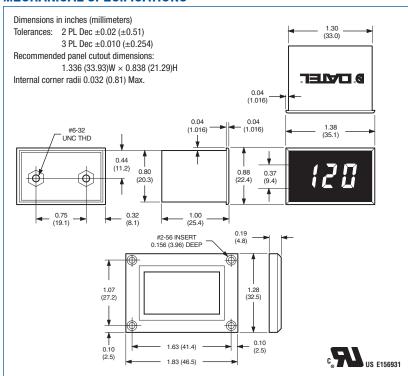
DMS-20PC-1-LM employs half-wave sinusoidal averaging (rms calibrated) and has a display resolution of 1Vac over its full input range. Packaged in a red-filter case with built-in bezel, the meter is fully encapsulated for ruggedness. All units are overvoltage protected to 300Vac.

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.



Suggested wiring (user supplied)

MECHANICAL SPECIFICATIONS



DIGITAL PANEL METERS

For updated, full-size data sheets visit: www.cd4power.com





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DIGITAL PANEL METERS