

DMS-20PC-0/1/2/8-DCM

Self-Powered, Positive Input LED
Display, DC Voltage Monitors



FEATURES

- Self-powered, only two connections required
- +4.50-19.99Vdc, +8.0-50.0Vdc, +30.0-199.9Vdc and +30-264Vdc models
- Ideal replacements for analog panel meters
- Ultra-low power consumption (8mA typ.)
- 0.37"/9.4mm high, red or blue, LED displays
- Subminiature 1.38" x 0.88" x 1.0" packages
- Super reliable, epoxy-encapsulated, construction

Functional Specifications

Input

Voltage Range: ①

DMS-20PC-0-DCM	+4.50 to +19.99Vdc
DMS-20PC-1-DCM	+8.0 to +50.0Vdc
DMS-20PC-2-DCM	+30 to +264Vdc
DMS-20PC-8-DCM	+30.0 to +199.9Vdc

Current Consumption:

DMS-20PC-0/1-DCM	13mA (max.)
DMS-20PC-2/8-DCM	7mA (max.)

Performance

Sampling Rate

2.5 readings/second

Resolution:

DMS-20PC-0-DCM	±0.01V
DMS-20PC-1/8-DCM	±0.1V
DMS-20PC-2-DCM	±1V

Accuracy @ +25°C:

DMS-20PC-0-DCM	±0.01V (typ.), ±0.03V (max.)
DMS-20PC-1/8-DCM	±0.1V (typ.), ±0.2V (max.)
DMS-20PC-2-DCM	±1V (typ.), ±2V (max.)

Mechanical

Dimensions

1.38" x 0.88" x 1.00"

Display Type

3 & 3½ digit, LED, 0.37"/9.4mm

Weight

1 ounce (28 grams)

Case Material

Polycarbonate

Environmental

Operating Temperature

-25 to +60°C

Storage Temperature

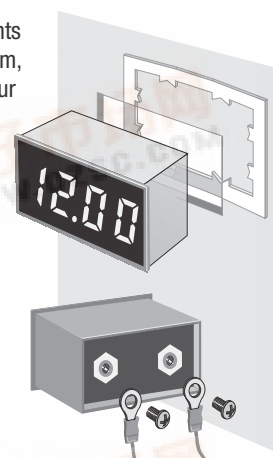
-40 to +75°C

Humidity (Non-condensing)

0 to 95%

DATEL's DMS-20PC-DCM Series of self-powered, positive-reading, dc voltage monitors are great replacements for older, hard-to-read, analog panel meters. Simply connect a positive dc voltage across the rear terminals and the meters are fully operational — no additional components or power supplies are required! The large, 0.37"/9.4mm, LED displays can be easily read from 15 feet away. Four versions are available: +4.50-19.99Vdc (0.01V resolution), +8.0-50.0Vdc (0.1V resolution), +30.0-199.9Vdc (0.1V resolution) and +30-264Vdc (1V resolution). Built-in reverse polarity protection assures simple, trouble-free installation.

All DMS-20PC-DCM's employ a high-resolution, 3½ digit A/D converter and precision metal-film resistors to achieve outstanding performance over an operating temperature range of -25 to +60°C. A rugged, epoxy-encapsulated, polycarbonate case provides excellent protection against moisture, shock and vibration. The DMS-20PC-DCM's are designed to fit the same panel cutout as DATEL's popular DMS-20PC-X-LM ac-line voltage monitors



Typical panel mount installation and suggested wiring (user supplied).

Ordering Information

DMS-20PC-0-DCM-C	+4.50 to +19.99V dc red LED voltage monitor
DMS-20PC-0-DCM-B-C	+4.50 to +19.99V blue LED dc voltage monitor
DMS-20PC-0-DCM-G-C	+4.50 to +19.99V green LED dc voltage monitor
DMS-20PC-1-DCM-C	+8.0 to +50.0V red LED dc voltage monitor
DMS-20PC-1-DCM-B-C	+8.0 to +50.0V blue LED dc voltage monitor
DMS-20PC-1-DCM-G-C	+8.0 to +50.0V green LED dc voltage monitor
DMS-20PC-2-DCM-C	+30 to +264V dc voltage monitor
DMS-20PC-8-DCM-C	+30.0 to +199.9V dc voltage monitor
DMS-20-CP	Panel cutout punch
DMS-BZL3-C	Panel mount bezel assembly
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

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



MECHANICAL SPECIFICATIONS

Dimensions in inches (millimeters)

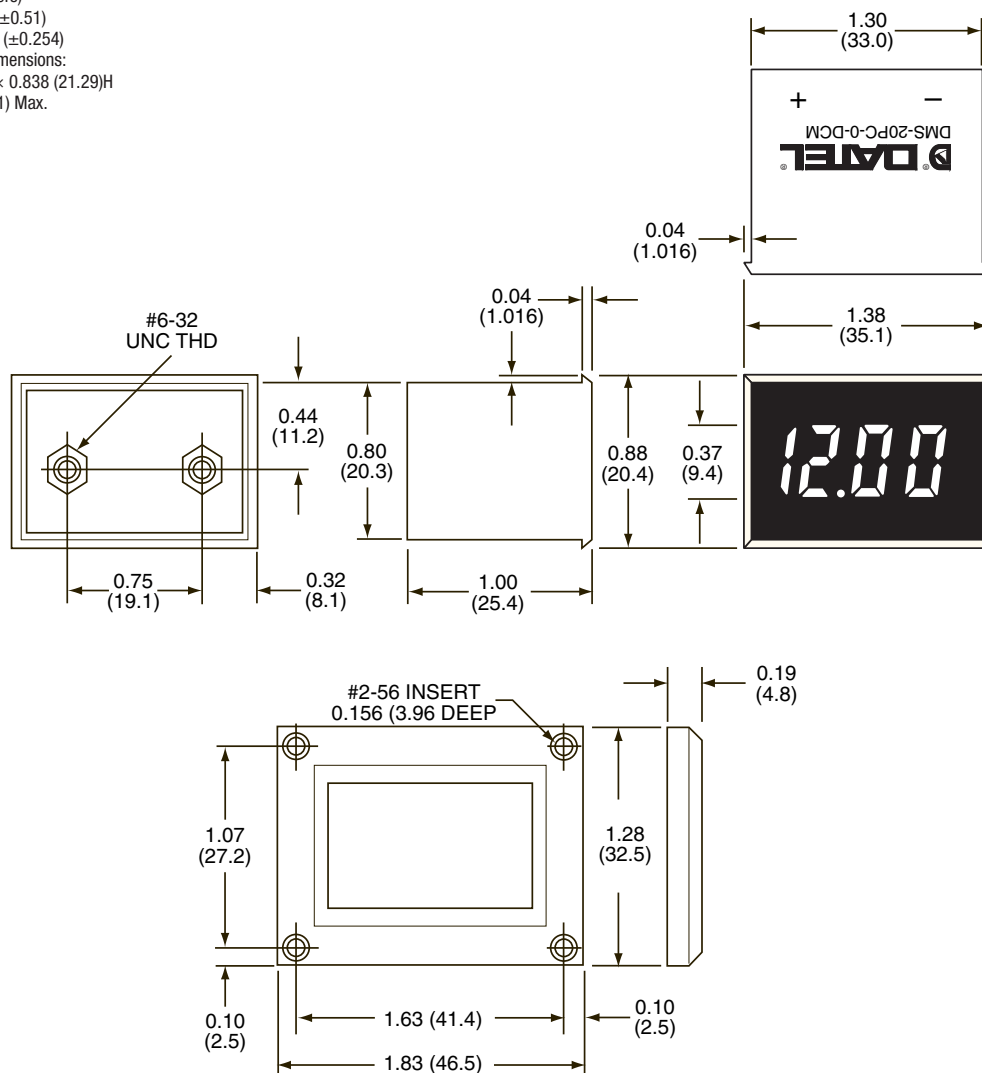
Tolerances: 2 PL Dec ± 0.02 (± 0.51)

3 PL Dec ± 0.010 (± 0.254)

Recommended panel cutout dimensions:

1.336 (33.93)W $\times$ 0.838 (21.29)H

Internal corner radii 0.032 (0.81) Max.



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11/24/08
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