



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, +8.0-40.0Vdc, +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, bright red, 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 +40.0Vdc |
| 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 & 3/4 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.

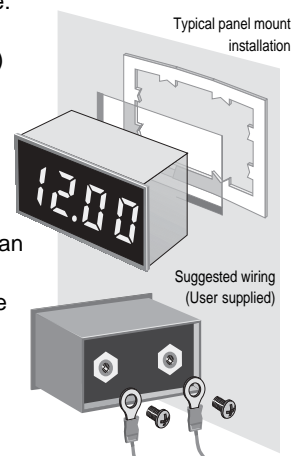
Ordering Information

| | |
|-----------------------|---------------------------------------|
| DMS-20PC-0-DCM | +4.50 to +19.99V dc voltage monitor |
| DMS-20PC-1-DCM | +8.0 to +40.0V dc voltage monitor |
| DMS-20PC-2-DCM | +30 to +264V dc voltage monitor |
| DMS-20PC-8-DCM | +30.0 to +199.9V dc voltage monitor |
| DMS-20-CP | Panel cutout punch |
| DMS-BZL3 | Panel mount bezel assembly |
| DMS-BZL4 | Panel mount bezel with sealing gasket |

Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with meters.

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, bright red, LED displays can be easily read from 15 feet away. Four versions are available: +4.50-19.99Vdc (0.01V resolution), +8.0-40.0Vdc (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.



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.

