

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

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





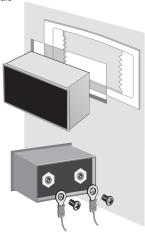
FEATURES

- 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

Murata Power Solutions' 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, epoxyencapsulated, polycarbonate case provides excellent protection against moisture, shock and vibration. The DMS-20PC-DCM's are designed to fit the same panel cutout as Murata Power Solutions' popular DMS-20PC-X-LM ac-line voltage monitors.



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

Functional Specifications

Input

Voltage Range: ①

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 @ $+25^{\circ}$ C:

 $\begin{array}{ll} {\rm DMS\text{-}20PC\text{-}0\text{-}DCM} & \pm 0.01V \ (typ.), \, \pm 0.03V \ (max.) \\ {\rm DMS\text{-}20PC\text{-}1/8\text{-}DCM} & \pm 0.1V \ (typ.), \, \pm 0.2V \ (max.) \\ {\rm DMS\text{-}20PC\text{-}2\text{-}DCM} & \pm 1V \ (typ.), \, \pm 2V \ (max.) \\ \end{array}$

Mechanical Dimensions

 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

 6-32 screw torque
 6-8 in-lb (0.7 − 0.9N-m)

Environmental

 $\begin{array}{ll} \textbf{Operating Temperature} & -25 \text{ to } +60 ^{\circ}\text{C} \\ \textbf{Storage Temperature} & -40 \text{ to } +75 ^{\circ}\text{C} \\ \textbf{Humidity (Non-condensing)} & 0 \text{ to } 95\% \\ \end{array}$

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

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

See www.murata-ps.com/dpm-availability for model-specific availability.

* Last time buy date is 3/31/2022.







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MECHANICAL SPECIFICATIONS

Tolerances:

Dimensions in inches (millimeters) 2 PL Dec ±0.02 (±0.51) 1.30 (33.0) 3 PL Dec ±0.010 (±0.254) Recommended panel cutout dimensions: 1.336 (33.93)W × 0.838 (21.29)H Internal corner radii 0.032 (0.81) Max. DWS-50PC-0-DCM 0.04 (1.016)0.04 1.38 (1.016)#6-32 (35.1)UNC THD 0.44 (11.2)0.80 0.37 0.88 (20.3)(20.4)(9.4)0.75 1.00 (25.4)(19.1)0.19 (4.8)#2-56 INSERT 0.156 (3.96 DEEP 1.07 (27.2) DMS-BZL3-C 1.28 Optional Bezel (32.5) \bigoplus 0.10 0.10 1.63 (41.4) (2.5)(2.5)

1.83 (46.5)

Murata Power Solutions, Inc.

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This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy:

Refer to: https://www.murata-ps.com/requirements/

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