

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

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



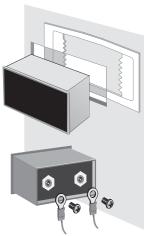
#### **FEATURES**

- 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, 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 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 **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.)

 $\pm 1V$ 

Mechanical

Dimensions1.38" x 0.88" x 1.00"Display Type3 & 3½ digit, LED, 0.37"/9.4mmWeight1 ounce (28 grams)Case MaterialPolycarbonate6-32 screw torque6-8 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 +8.0 to +50.0V green LED dc voltage monitor DMS-20PC-1-DCM-G-C DMS-20PC-2-DCM-C +30 to +264V dc voltage monitor +30.0 to +199.9V dc voltage monitor DMS-20PC-8-DCM-C 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.







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

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

#### 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 #2-56 INSERT 0.156 (3.96 DEEP 1.07 (27.2) DMS-BZL3-C 1.28 Optional Bezel (32.5)0.10 0.10 1.63 (41.4) (2.5)(2.5)1.83 (46.5)

Murata Power Solutions, Inc. 11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A. ISO 9001 and 14001 REGISTERED



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

Refer to: <a href="http://www.murata-ps.com/requirements/">http://www.murata-ps.com/requirements/</a>

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Murata:

<u>DMS-20PC-0-DCM-B-C</u> <u>DMS-20PC-0-DCM-C</u> <u>DMS-20PC-1-DCM-B-C</u> <u>DMS-20PC-1-DCM-C</u> <u>DMS-20PC-1-DCM-C</u> <u>DMS-20PC-1-DCM-C</u>