

DMS-20PC-7-DCM

-36 to-75Vdc, Self-Powered LED Display, DC Voltage Monitor

Discontinued





FEATURES

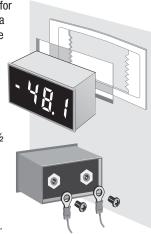
- Great for -48Vdc telecom power monitoring
- Self-powered 2-wire operation
- -36 to -75V operating input range
- Ultra-low power consumption, 8mA (typ.) at -48V
- -200V input transient protection
- Reverse polarity protected to +100V
- 0.377/9.4mm high, bright red, LED display
- Subminiature 1.38" x 0.88" x 1.0" package
- Super reliable, epoxy-encapsulated construction
- -25 to +60°C operating temperature range

Murata Power Solutions' new DMS-20PC-7-DCM self-powered digital voltage monitor is designed for monitoring -48V intermediate bus voltages in modern telecom/datacom/computer equipment. Its compact size and low power

consumption (8mA typical) make it the ideal replacement for older, hard-to-read, analog panel meters. Simply connect a -36 to -75Vdc input across the two rear terminals and the meter is fully operational!

The DMS-20PC-7-DCM's subminiature package $(1.38^{\circ} \times 0.88^{\circ} \times 1.0^{\circ})$ houses a large, $0.37^{\circ}/9.4$ mm, bright red LED display which can be easily read from 15 feet away. Built-in reverse polarity and transient protection assures simple, trouble-free installation.

The DMS-20PC-7-DCM employs a high-resolution, 3½ digit analog-to-digital converter and precision metal-film resistors to achieve outstanding performance over its entire operating temperature range of –25 to +60°C. A rugged, epoxy-encapsulated, polycarbonate case (available only from Murata Power Solutions!) provides excellent protection against moisture, shock and vibration.



Typical panel mount installation Suggested wiring (user supplied)

Functional Specifications

Input

Voltage Range ① −36.0 to −75.0Vdc

Current Consumption 13.0mA (max.)

Reverse Polarity Protection +100V (max.)

Transient Protection −200V (1µsec duration)

Performance

Sampling Rate 2.5 readings/second

Resolution 0.1

Accuracy @ $+25^{\circ}$ C ± 0.1 V (typ.), ± 0.2 V (max.)

Temperature Drift

 $(-25 \text{ to } +60 ^{\circ}\text{C})$ $\pm 0.2 \text{ counts/}^{\circ}\text{C (max.)}$

Mechanical

Dimensions 1.38" x 0.88" x 1.00"
Display Type 3 digit, red 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

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

 Operation and accuracy at inputs above or below this range are not specified.





Ordering Information

DMS-20PC-7-DCM -36.0 to -75.0V dc voltage monitor

DMS-20-CP Panel cutout punch

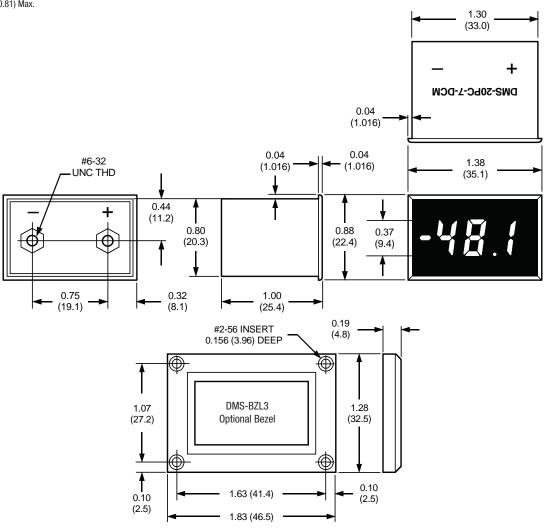
DMS-BZL3 Panel mount bezel assembly
DMS-BZL4 Panel mount bezel with sealing gasket

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

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 $\begin{array}{ll} \mbox{Dimensions in inches (millimeters)} \\ \mbox{Tolerances:} & 2 \mbox{PL Dec } \pm 0.02 \ (\pm 0.51) \\ \mbox{3 PL Dec } \pm 0.010 \ (\pm 0.254) \\ \mbox{Recommended panel cutout dimensions:} \\ \mbox{1.336 } (33.93) \mbox{W} \times 0.838 \ (21.29) \mbox{H} \\ \mbox{Internal corner radii } 0.032 \ (0.81) \mbox{ Max.} \\ \end{array}$



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

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

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DMS-20PC-7-DCM-C