



## FEATURES

- Self-powered, only two connections required
- +2.00 to +11.00Vdc input range
- 0.01V resolution;  $\pm 0.05\%$  accuracy
- Ideal for low-voltage (3.3V) power supply monitoring
- Digital replacement for analog panel meters
- 0.37"/9.4mm, bright red, LED display
- Subminiature 1.38" x 0.88" x 1.0" package
- Super reliable, epoxy-encapsulated construction
- Reverse polarity protected
- -25 to +60°C temperature range
- Low power consumption

## Functional Specifications

### Input

Voltage Range ①	+2.00 to +11.00Vdc
Current Consumption	
@Vin = 2/3/5/9Vdc	55/30/17/10mA (max.)
Reverse Polarity Protection	15V (max.)

### Performance

Sampling Rate	2.5 readings/second
Resolution	0.01V
Accuracy @ +25°C	$\pm 0.01V$ (typ.), $\pm 0.02V$ (max.)
Temperature Drift	
(-25 to +60°C)	$\pm 0.3$ counts/°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

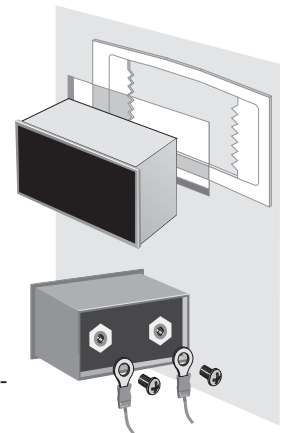
Operating Temperature	-25 to +60°C
Storage Temperature	-40 to +75°C
Humidity (Non-condensing)	0 to 95%

① Operation and accuracy at inputs above or below this range are not specified.

Murata Power Solutions' DMS-20PC-3-DCM self-powered dc voltage monitor is perfect for precision monitoring of all low-voltage power supplies. Simply connect a positive dc voltage across its two rear terminals and the meter is fully operational with no additional components required! A measurement resolution of 0.01Vdc enables precise adjustment of power supply outputs. The large, 0.37"/9.4mm, bright red, LED display, unlike most LCD's, can be easily read from 15 feet away under virtually any lighting conditions. Built-in reverse polarity protection assures quick, trouble-free installation.

The DMS-20PC-3-DCM utilizes a high-resolution, 3 digit analog-to-digital converter and precision metal-film resistors to achieve outstanding performance over its 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-3-DCM uses the same panel cutout dimensions as all DMS-20 Series panel voltmeters and monitors; this feature assures uniform displays in multiple-meter applications.



Typical panel mount installation and suggested wiring (user supplied)

## Ordering Information

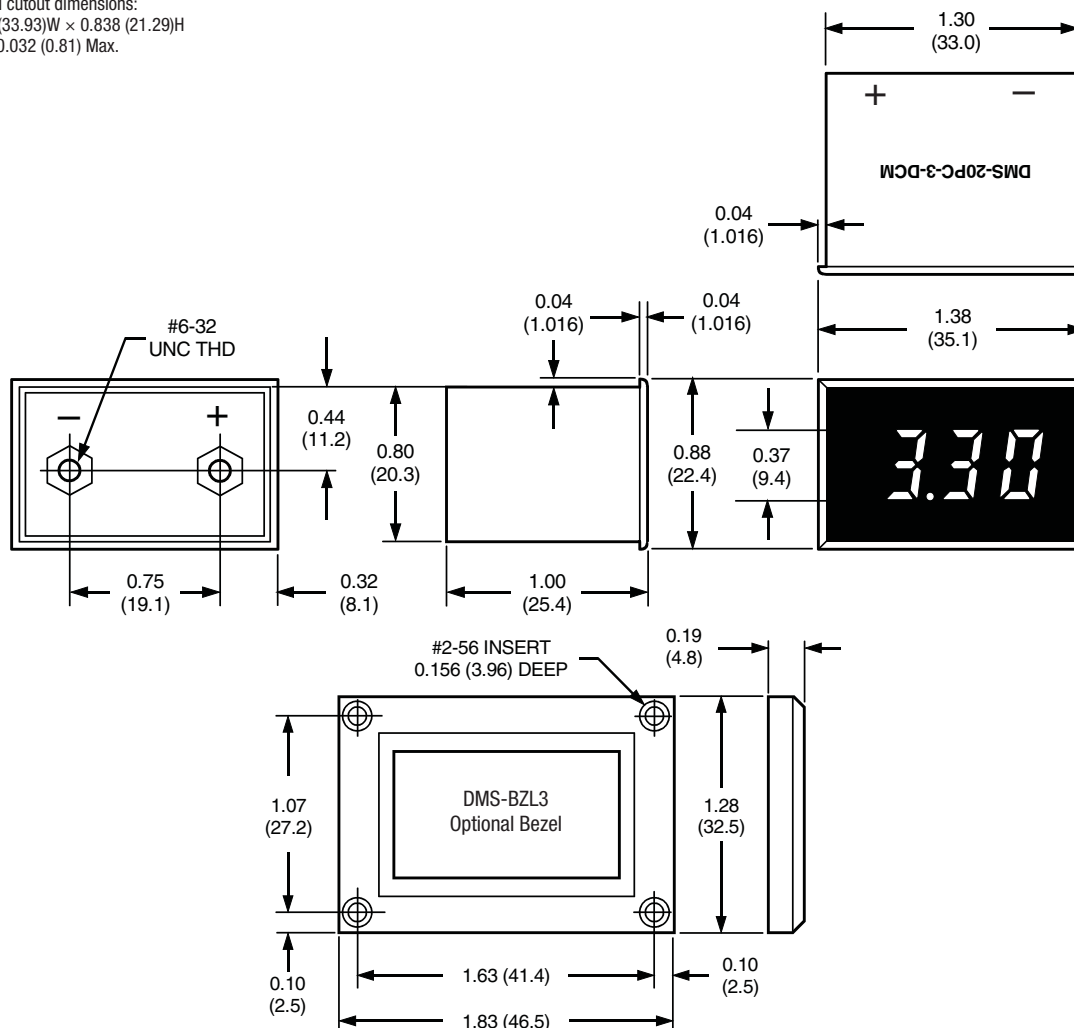
<b>DMS-20PC-3-DCM-C</b>	+2.00 to +11.00V dc voltage monitor
<b>DMS-20-CP-C</b>	Panel cutout punch
<b>DMS-BZL3-C</b>	Panel mount bezel assembly
<b>DMS-BZL4-C</b>	Panel mount bezel with sealing gasket

Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with each meter. See [www.murata.com/products/power](http://www.murata.com/products/power) for model-specific availability.



## MECHANICAL SPECIFICATIONS

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



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: <http://www.murata-ps.com/requirements/>

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.

© 2015 Murata Power Solutions, Inc.