



### FEATURES

- Self-powered, 2-wire operation
- +18.0 to +90.0Vdc or +50.0 to +150.0Vdc ranges
- Ideal for 42V automotive systems and 120V chargers
- Reverse polarity protected; 0.1V resolution
- Built-in "VDC" annunciator
- Large (0.37"/9.4mm) LCD displays
- Subminiature 1.38" x 0.88" x 0.66" packages
- Rugged, ABS package

### Functional Specifications

#### Input

Voltage Range: ①

DMS-20LCD-2-DCM	+18.0 to +90.0Vdc
DMS-20LCD-3-DCM	+50.0 to +150.0Vdc

Max. Current Consumption:

DMS-20LCD-2-DCM	2mA @+50V, 3mA @ +90V
DMS-20LCD-3-DCM	1.5mA @ +100V, 2mA @ +150V

#### Performance

Sampling Rate 2.5 readings/second

Accuracy @ +25°C:

DMS-20LCD-2-DCM	±0.1V (typ.), ±0.3V (max.)
DMS-20LCD-3-DCM	±0.2V (typ.), ±0.4V (max.)

Temperature Drift (0 to +60°C):

DMS-20LCD-2-DCM	±0.3 counts/°C (max.)
DMS-20LCD-3-DCM	±0.4 counts/°C (max.)

#### Mechanical

Display Type:

DMS-20LCD-2-DCM	3 digit LCD, 0.37"/9.4mm high
DMS-20LCD-3-DCM	3½ digit LCD, 0.37"/9.4mm high

Weight 0.5 ounce (14 grams)

Case Material ABS

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

#### Environmental ②

Operating Temperature 0 to +60°C

Storage Temperature -20 to +75°C

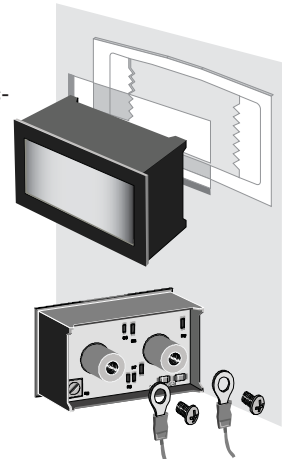
Humidity (Non-condensing) 0 to 85%

① Operation and accuracy at voltages above or below these ranges are not specified.

② Meters are not sealed; Do not expose to moisture or other contaminants.

DATEL's DMS-20LCD-2/3-DCM, self-powered, +90V and +150V voltage monitors set new standards for quality, performance, size and cost. Simply apply dc power to the two rear terminals and the unit is fully operational---no additional components or connections are required! Their large, 0.37"/9.4mm, LCD displays feature built-in "VDC" annunciators and can be easily read from 10 feet. Two models are available: one for +42Vdc nominal operation (+18.0 to +90.0V range, '-2-DCM'), the other for +120Vdc nominal operation (+50.0 to +150.0V range, '-3-DCM'). Reverse polarity protection and 0.1V resolution are standard on both models.

Like their +12V ('-0-DCM') and +24V ('-1-DCM') counterparts, DMS-20LCD-2/3-DCM meters utilize a precision analog-to-digital converter and ultra-stable passive components to achieve excellent performance over the wide operating temperature range of 0 to +60°C. A rugged, ABS plastic package provides excellent protection against shock and vibration. DMS-20LCD-DCM's are the most accurate, LCD-display, dc-voltage monitors available at any price.



Typical panel mount installation and suggested wiring (user supplied)

### Ordering Information

<b>DMS-20LCD-2-DCM</b>	+18.00 to 90.0V dc voltage monitor
<b>DMS-20LCD-3-DCM</b>	+50.0 to 150.0V dc voltage monitor
<b>DMS-20-CP</b>	Panel cutout punch
<b>DMS-BZL3</b>	Panel mount bezel
<b>DMS-BZL4</b>	Panel mount bezel with sealing gasket

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

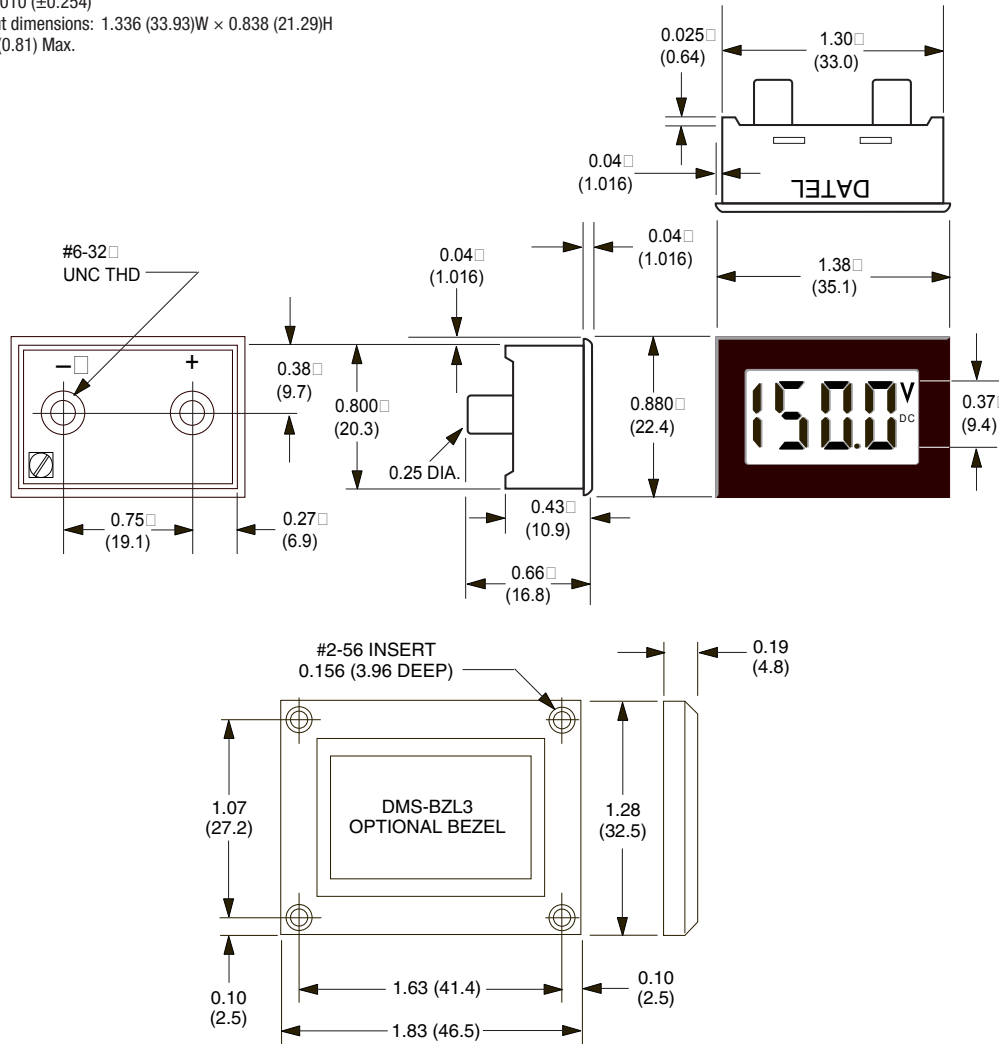


Dimensions in inches (millimeters)

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

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.  
© 2012 Murata Power Solutions, Inc.