



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

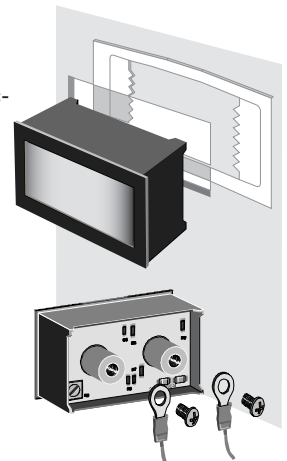
Humidity (Non-condensing) 0 to 85%

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

DMS-20LCD-2-DCM	+18.00 to 90.0V dc voltage monitor
DMS-20LCD-3-DCM	+50.0 to 150.0V dc voltage monitor
DMS-20-CP	Panel cutout punch
DMS-BZL3	Panel mount bezel
DMS-BZL4	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 ± 0.02 (± 0.51)

3 PL Dec ± 0.010 (± 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.

