

DMS-20LCD-0/1 Series

Self-Powered, +12V and +24V, LCD Display
2-Wire DC Voltage Monitors



FEATURES

- Self-powered, only two connections required
- +6.50-18.00Vdc (0.01V resolution) or
- +8.0-50.0Vdc (0.1V resolution) input ranges
- Ideal for battery-powered systems
- Reverse polarity protected
- 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-0-DCM	+6.50 to +18.00Vdc
DMS-20LCD-1-DCM	+8.0 to +50.0Vdc

Max. Current Consumption:

DMS-20LCD-0-DCM	2mA @ +12V, 7mA @ +18V
DMS-20LCD-1-DCM	2mA @ +24V, 6mA @ +50V

Performance

Sampling Rate 2.5 readings/second

Accuracy @ +25°C:

DMS-20LCD-0-DCM	±0.01V (typ.), ±0.03V (max.)
DMS-20LCD-1-DCM	±0.1V (typ.), ±0.2V (max.)

Temperature Drift (0 to +60°C):

DMS-20LCD-0-DCM	±0.4 counts/°C (max.)
DMS-20LCD-1-DCM	±0.04 counts/°C (max.)

Mechanical

Display Type:

DMS-20LCD-0-DCM	3½ digit LCD, 0.37"/9.4mm high
DMS-20LCD-1-DCM	3 digit LCD, 0.37"/9.4mm high

Weight

	0.5 ounce (14 grams)
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Case Material

	ABS
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Environmental ②

Operating Temperature 0 to +60°C

Storage Temperature -20 to +75°C

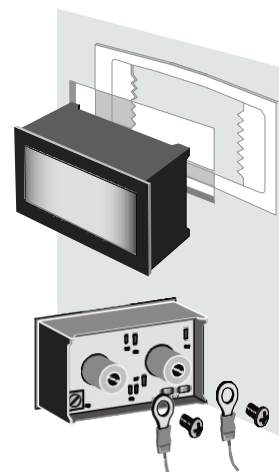
Humidity (non-condensing) 0 to 85%

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.

Murata Power Solutions' new DMS-20LCD-0/1-DCM, self-contained, self-powered, dc voltage monitors set new standards for quality, performance, size and cost. Apply power to the two rear terminals and the unit is operational. No additional components are required! The large, 0.37"/9.4mm, LCD display, with built-in "VDC" annunciator, can be easily read from 10 feet. Two models are available: one for 12Vdc nominal operation (+6.50-18.00V range, 0.01V resolution), the other for 24Vdc nominal operation (+8.0-50.0V range, 0.1V resolution). Reverse polarity protection is standard on both models.

The DMS-20LCD-DCM utilizes a precision analog-to-digital converter and ultra-stable passive components to achieve excellent performance over the 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 one of the most cost effective, LCD-display, digital voltmeters available.



Typical panel mount installation and suggested wiring (user supplied).

Ordering Information

DMS-20LCD-0-DCM-C	+6.50 to 18.00V dc voltage monitor
DMS-20LCD-1-DCM-C	+8.0 to 50.0V dc voltage monitor
DMS-20-CP	Panel cutout punch
DMS-BZL3-C	Panel mount bezel
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.



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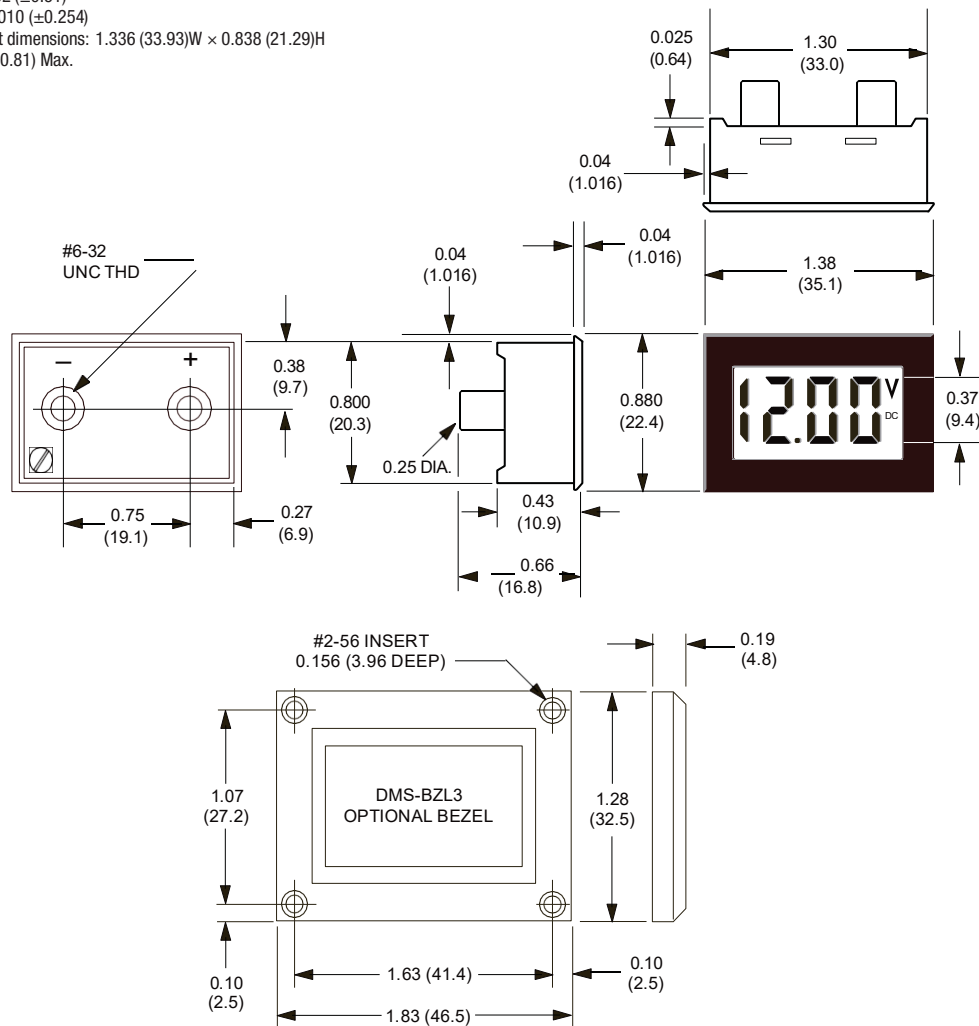
Dimensions in inches (millimeters)

Tolerances: 2 PL Dec ± 0.02 (± 0.51)

3 PL Dec ± 0.010 (± 0.254)

Recommended panel cutout dimensions: 1.336 (33.93)W × 0.838 (21.29)H

Internal corner radii 0.032 (0.81) Max.



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ISO 9001 REGISTERED



This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy: Refer to: <https://www.murata.com/products/power/requirements>

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