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INNOVATION and EXCELLENCE



DMS-20LCD-0/1-DCM

Self-Powered, LCD Display
Digital, DC Voltage Monitors

Features

- Self-powered, only two connections required
- +6.50-18.00Vdc (0.01V resolution) or +8.0-40.0Vdc (0.1V resolution) input ranges
- Ideal for battery-powered systems
- Reverse polarity protected
- Built-in "V_{DC}" 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 +40.0Vdc

Current Consumption:

DMS-20LCD-0-DCM	3mA (max. at V _{IN} =+12V)
DMS-20LCD-1-DCM	2.5mA (max. at V _{IN} =+24V)

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 ounces (14 grams)

Case Material ABS

Environmental

Operating Temperature	0 to +60°C
Storage Temperature	-20 to +75°C
Humidity (Non-condensing)	0 to 95%

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

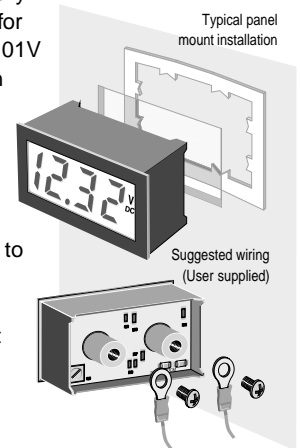
Ordering Information

DMS-20LCD-0-DCM	+6.50-18.00V dc voltage monitor
DMS-20LCD-1-DCM	+8.0-40.0V 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

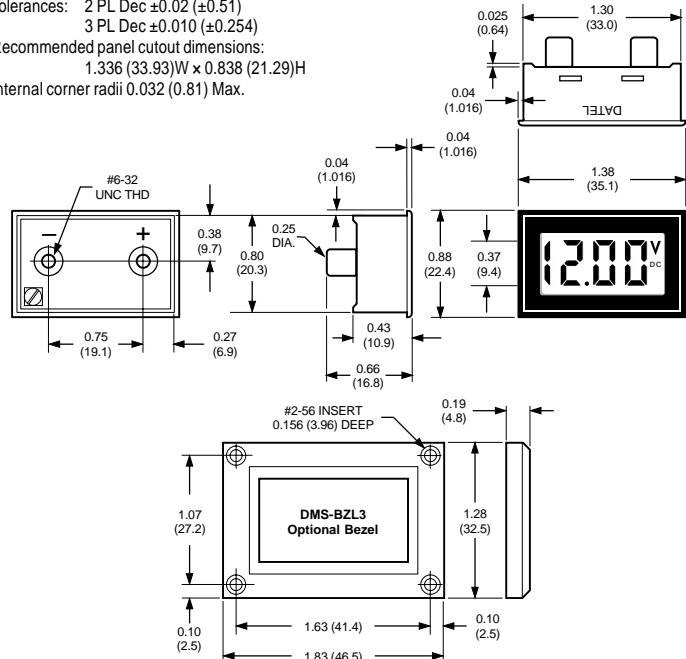
DATTEL's new DMS-20LCD-DCM, self-contained, self-powered, dc voltage monitors set new standards for quality, performance, size and cost. Simply apply power to the two rear terminals and the unit is operational. No additional components are required! The large, 0.37"/9.4mm, LCD display, with built-in "V_{DC}" 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 (+8.0-40.0V 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 without a doubt the most cost-effective, LCD-display, digital voltmeters available anywhere, at any price.



Mechanical Specifications

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 x 0.838 (21.29)H
Internal corner radii 0.032 (0.81) Max.



DS-0348A 3/98

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