

# DMS-20PC-3-DCM

+2 to +11Vdc, Self-Powered LED Display, DC Voltage Monitor





#### **FEATURES**

- Self-powered, only two connections required
- +2.00 to +11.00Vdc input range
- 0.01V resolution; ±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  $\pm 0.01$ V (typ.),  $\pm 0.02$ V (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

Environmental

 $\begin{array}{ll} \text{Operating Temperature} & -25 \text{ to } +60^{\circ}\text{C} \\ \text{Storage Temperature} & -40 \text{ to } +75^{\circ}\text{C} \\ \text{Humidity (Non-condensing)} & 0 \text{ to } 95\% \\ \end{array}$ 

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



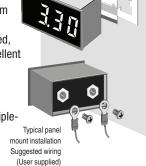


DATEL's DMS-20PC-3-DCM self-powered dc voltage monitor is perfect for precision monitoring of all low-voltage power supplies. Simply connect a positive dc voltage across its two rear terminals and the meter is fully operational with no additional components required! A measurement resolution of 0.01Vdc 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 multiplemeter applications.



## **Ordering Information**

DMS-20PC-3-DCM-C +2.00 to +11.00V dc voltage monitor

DMS-20-CP-C Panel cutout punch
DMS-BZL3-C Panel mount bezel assembly

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



# DMS-20PC-3-DCM

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#### **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: 1.30 1.336 (33.93)W × 0.838 (21.29)H (33.0)Internal corner radii 0.032 (0.81) Max. DWS-50PC-3-DCM 0.04 (1.016)0.04 0.04 (1.016)(1.016)#6-32 (35.1)UNC THD 0.44 (11.2)0.80 0.88 0.37 (20.3)(22.4)(9.4)1.00 (19.1)(8.1)(25.4)0.19 #2-56 INSERT (4.8)0.156 (3.96) DEEP

DMS-BZL3

Optional Bezel

1.63 (41.4)

1.83 (46.5)



1.07

(27.2)

0.10

(2.5)

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