

# DMS-20PC-0/1/2/8-DCM

## Self-Powered, Positive Input LED Display, DC Voltage Monitors



### **FEATURES**

- Self-powered, only two connections required
- +4.50-19.99Vdc, +8.0-50.0Vdc, +30.0-199.9Vdc and +30-264Vdc models
- Ideal replacements for analog panel meters
- Ultra-low power consumption (8mA typ.)
- 0.37"/9.4mm high, red or blue, LED displays
- Subminiature 1.38" x 0.88" x 1.0" packages
- Super reliable, epoxy-encapsulated, construction

#### **Functional Specifications**

#### Input

mput	
Voltage Range: ①	
DMS-20PC-0-DCM	+4.50 to +19.99Vdc
DMS-20PC-1-DCM	+8.0 to +50.0Vdc
DMS-20PC-2-DCM	+30 to +264Vdc
DMS-20PC-8-DCM	+30.0 to +199.9Vdc
Current Consumption:	
DMS-20PC-0/1-DCM	13mA (max.)
DMS-20PC-2/8-DCM	7mA (max.)
Performance	
Sampling Rate	2.5 readings/second
Resolution:	
DMS-20PC-0-DCM	±0.01V
DMS-20PC-1/8-DCM	±0.1V
DMS-20PC-2-DCM	±1V
Accuracy @ +25°C:	
DMS-20PC-0-DCM	$\pm 0.01V$ (typ.), $\pm 0.03V$ (max.)
DMS-20PC-1/8-DCM	$\pm 0.1V(typ.), \pm 0.2V (max.)$
DMS-20PC-2-DCM	$\pm 1V(typ.), \pm 2V(max.)$
Mechanical	
Dimensions	1.38" x 0.88" x 1.00"
Display Type	3 & 31/2 digit, LED, 0.37"/9.4mm
Weight	1 ounce (28 grams)
Case Material	Polycarbonate
6-32 screw torque	6-8 in-lb (0.7 – 0.9N-m)
Environmental	
Operating Temperature	–25 to +60°C
Storage Temperature	-40 to +75°C
Humidity (Non-condensing)	0 to 95%

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



DATEL's DMS-20PC-DCM Series of self-powered, positive-reading, dc voltage monitors are great replacements for older, hard-to-read, analog panel meters. Simply connect a posi-

tive dc voltage across the rear terminals and the meters are fully operational — no additional components or power supplies are required! The large, 0.37"/9.4mm, LED displays can be easily read from 15 feet away. Four versions are available: +4.50-19.99Vdc (0.01V resolution), +8.0-50.0Vdc (0.1V resolution), +30.0-199.9Vdc (0.1V resolution) and +30-264Vdc (1V resolution). Built-in reverse polarity protection assures simple, trouble-free installation.

All DMS-20PC-DCM's employ a high-resolution, 31/2 digit A/D converter and precision metal-film resistors to achieve outstanding performance over an operating temperature range of -25 to +60°C. A rugged, epoxyencapsulated, polycarbonate case provides excellent protection against moisture, shock and vibration. The DMS-20PC-DCM's are designed to fit the same panel cutout as DATEL's popular DMS-20PC-X-LM ac-line voltage monitors



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

Ordering Information		
DMS-20PC-0-DCM-C DMS-20PC-0-DCM-B-C DMS-20PC-0-DCM-G-C DMS-20PC-1-DCM-G-C DMS-20PC-1-DCM-B-C DMS-20PC-1-DCM-B-C DMS-20PC-1-DCM-G-C DMS-20PC-2-DCM-C DMS-20PC-8-DCM-C DMS-20-CP DMS-BZL3-C	+4.50 to +19.99V dc red LED voltage monitor +4.50 to +19.99V blue LED dc voltage monitor +4.50 to +19.99V green LED dc voltage monitor +8.0 to +50.0V red LED dc voltage monitor +8.0 to +50.0V blue LED dc voltage monitor +8.0 to +50.0V green LED dc voltage monitor +30 to +264V dc voltage monitor +30.0 to +199.9V dc voltage monitor Panel cutout punch 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



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### **MECHANICAL SPECIFICATIONS**

Dimensions in inches (millimeters) 2 PL Dec ±0.02 (±0.51) Tolerances: 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.



**Optional Bezel** 

1.63 (41.4)

1.83 (46.5)

 $\odot$ 

0.10

(2.5)

(32.5)

0.10

(2.5)

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