



DMS-20PC-7-DCM

–36 to –75Vdc, Self-Powered LED Display, DC Voltage Monitor

Features

- Great for –48Vdc telecom power monitoring
- Self-powered 2-wire operation
- –36 to –75V operating input range
- Ultra-low power consumption, 8mA (typ.) at –48V
- –200V input transient protection
- Reverse polarity protected to +100V
- 0.37"/9.4mm high, bright red, LED display
- Subminiature 1.38" x 0.88" x 1.0" package
- Super reliable, epoxy-encapsulated construction
- –25 to +60°C operating temperature range

Functional Specifications

Input

Voltage Range ①	–36.0 to –75.0Vdc
Current Consumption	13.0mA (max.)
Reverse Polarity Protection	+100V (max.)
Transient Protection	–200V (1µsec duration)

Performance

Sampling Rate	2.5 readings/second
Resolution	0.1V
Accuracy @ +25°C	±0.1V (typ.), ±0.2V (max.)
Temperature Drift (–25 to +60°C)	±0.2 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

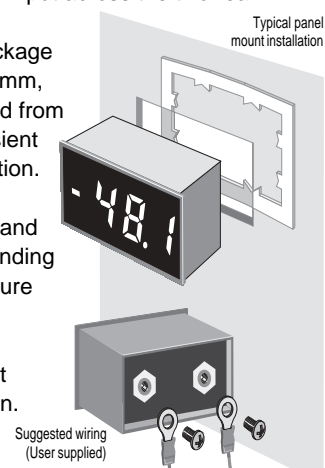
Operating Temperature	–25 to +60°C
Storage Temperature	–40 to +75°C
Humidity (Non-condensing)	0 to 95%

① Operation and accuracy at inputs above or below this range are not specified.

DATEL's new DMS-20PC-7-DCM self-powered digital voltage monitor is designed for monitoring –48V intermediate bus voltages in modern telecom/datacom/computer equipment. Its compact size and low power consumption (8mA typical) make it the ideal replacement for older, hard-to-read, analog panel meters. Simply connect a –36 to –75Vdc input across the two rear terminals and the meter is fully operational!

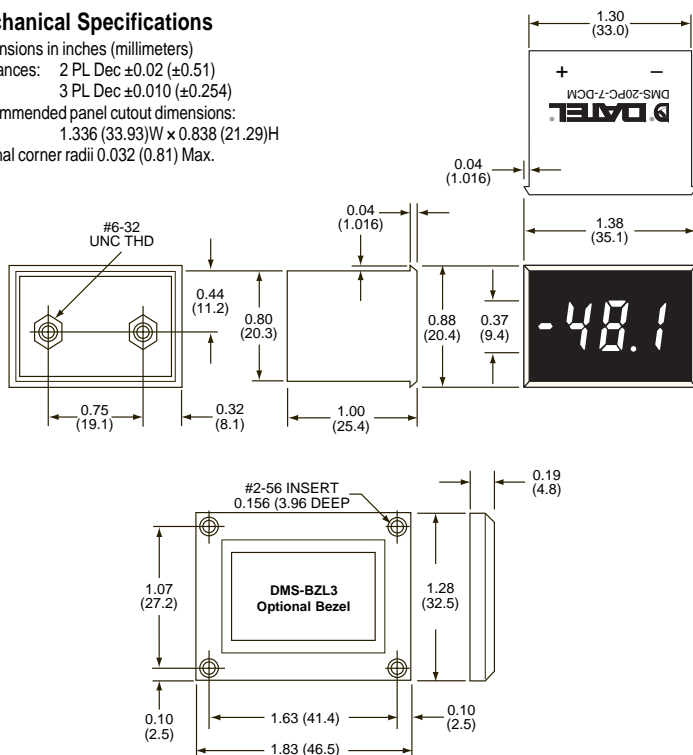
The DMS-20PC-7-DCM's subminiature package (1.38" x 0.88" x 1.0") houses a large, 0.37"/9.4mm, bright red LED display which can be easily read from 15 feet away. Built-in reverse polarity and transient protection assures simple, trouble-free installation.

The DMS-20PC-7-DCM employs a high-resolution, 3½ digit analog-to-digital converter and precision metal-film resistors to achieve outstanding performance over its entire operating temperature range of –25 to +60°C. A rugged, epoxy-encapsulated, polycarbonate case (available only from DATEL!) provides excellent protection against moisture, shock and vibration.



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.



Ordering Information

DMS-20PC-7-DCM	–36.0 to –75.0V dc voltage monitor
DMS-20-CP	Panel cutout punch
DMS-BZL3	Panel mount bezel assembly
DMS-BZL4	Panel mount bezel with sealing gasket

Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with each meter