

# DMS-20PC-FM

## Self-Powered, 3-Digit, LED AC Line Frequency Monitors

Order online at [www.datel.com](http://www.datel.com)

### Features

- Self-powered, no external supplies required
- 3 models: 47.0-99.0Hz (85-140Vac)  
47.0-99.0Hz (170-264Vac)  
350-450Hz (85-140Vac)
- Screw terminals simplify panel mounting
- Ideal for emergency power equipment
- Small 1.38" x 0.88" x 1.0" packages
- Epoxy encapsulated for harsh environments
- Large (0.40"/10.2mm) red LED displays

### Functional Specifications

#### Input

Freq. Range (Voltage Range): ①

DMS-20PC-1-FM	47.0-99.0Hz (85-140Vac)
DMS-20PC-2-FM	350-450Hz (85-140Vac)
DMS-20PC-3-FM	47.0-99.0Hz (170-264Vac)

Current Consumption 50mA rms (max.)

Overvoltage Protection:

DMS-20PC-1/2-FM	200Vrms (max.)
DMS-20PC-3-FM	300Vrms (max.)

#### Performance

Sampling Rate 4 readings/second

Accuracy (-25 to +60°C):

DMS-20PC-1/3-FM	±0.1Hz
DMS-20PC-2-FM	±1.0Hz

#### Mechanical

Dimensions 1.38" x 0.88" x 1.00"

Display Type 3 digit, red LED, 0.4"/10.2mm

Weight 1 ounce (28 grams)

Case Material Polycarbonate

#### Environmental

Operating Temperature -25 to +60°C

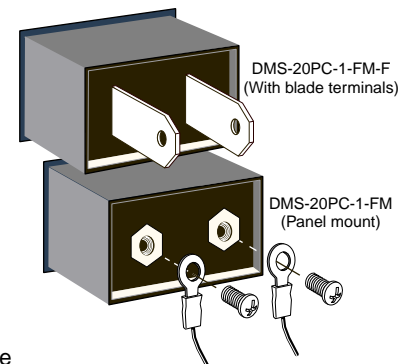
Storage Temperature -40 to +75°C

Humidity (Non-condensing) 0 to 95%

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

DATEL's new DMS-20PC-FM Series are the world's smallest, self-powered, ac frequency meters. Simply connect the ac line to the two rear input terminals, and the unit is fully operational with no additional components or auxiliary power required! Two, 50/60Hz models operate over input voltage ranges of 85-140Vac or 170-264Vac. A third, 400Hz model operates over an input voltage range of 85-140Vac. Despite their small size (1.38" x 0.88" x 1.0"), DMS-20PC-FM meters feature large 0.40"/10.2mm red LED's that can be easily read from 15 feet away.

An ultra-stable, quartz-crystal-controlled, embedded microcomputer provides accuracies of ±0.1Hz (50/60Hz models) or ±1.0Hz (400Hz model) over the entire operating temperature range of -25 to +60°C. Epoxy encapsulated plastic packages provide excellent protection against the harsh environments normally encountered by emergency backup power generators. DMS-20PC-FM meters are the exact same size as DATEL's popular AC Line Voltage Monitors (models DMS-20PC-X-LM).



### Mechanical Specifications

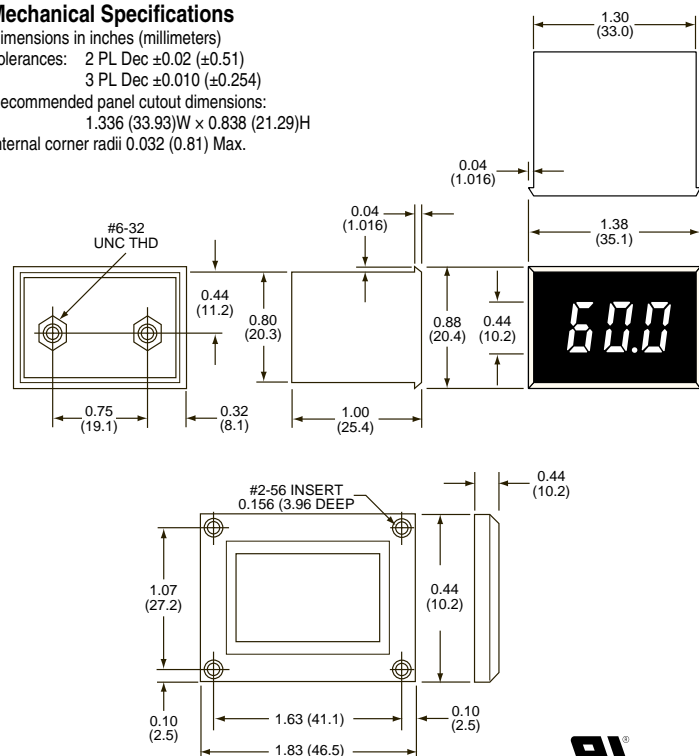
Dimensions in inches (millimeters)

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.



**CAL** USE156931

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