

HIGH SPEED MICRO PROCESSOR DIGITAL PANEL MOUNT METER

MODEL DPM-3



The DPM-3 digital panel meter is a low cost solution to a wide range of load/force and torque monitoring applications. By simple front panel push button setup the DPM-3 can be scaled to a full five digits from 0 to 99,999 to read directly in engineering units such as grams, ounces, pounds, inch pounds, etc. The DPM-3 samples 60 readings per second (50 for 50 Hz operation) for fast control response, true peak reading capability, and an analog output (optional) that accurately tracks the signal input. The meter has an adaptive digital filter that can automatically select the best time constant for minimum noise yet respond rapidly to an actual change in signal level. The peak value can be displayed by a push of a button on the front panel. Auto tare allows the meter to be set to zero for any input signal level. The DPM-3 provides an isolated 5, 10, or 24 VDC output for bridge transducer/sensors.

FEATURES

- 60 Conversions per second for:
 - Fast control response
 - True peak reading
 - Analog outputs (optional) that track the input
- Scalable to 5 digits
 - Engineering units to +/- .99,999
 - Setup by front panel push buttons
- Worldwide input power:
 - 85 to 264 VAC and 90 to 370 VDC
- Isolated 5, 10, or 24 VDC output
 - Provides transmitter excitation
- Peak hold and auto tare
- Automatic, adaptive digital filtering
- Plug-in screw terminals

PLUG-IN OPTIONS

- **OPTION C**
 - Dual setpoint controller
 - 10 Amp, 240 VAC Form C relays
- **OPTION H**
 - Isolated linearized analog outputs
 - 0 to 10 VDC or 0 to 20 (4/20) mA
- **OPTION T**
 - Isolated digital communications
 - RS-232 for interface and meter setup
 - RS-485 to interface with multiple meters
 - Baud rates from 300 to 19,200
- **OPTION V**
 - Isolated low voltage power supply
 - 9 to 37 VDC and 8 to 28 VAC inputs
 - Isolated 5, 10, or 24 VDC output

New

Windows based software for data logging available upon request.

SPECIFICATIONS

DISPLAY

Type: 5 LED, 7 -segment, 14.2mm (.56")
Color: Red
Range: -99999 to +99999 and
-99990 to +99990

A to D CONVERSION

Technique (Pat. Pend): Concurrent Slope™
Rate: 60/s at 60 Hz operation
50/s at 50 Hz operation
Output Update Rate: 56/s at 60 Hz
47/s at 50 Hz
Display Update Rate: 3.5/s at 60 Hz
3.5/s at 50 Hz

ACCURACY at 25°C

Load Cell Meter: 0.01% FS +/- 1 Ct.
Span Tempco: 0.003% of reading/°C
Zero Tempco: 0.1 Cts./°C
Reference Junction: 0.03 degree/degree

NOISE REJECTION

CMV from DC to 60 Hz: Safety-related to 250 VAC
4.2 kVp per High Voltage Test
CMR from DC to 60 Hz: 130 dB
NMR to 50/60Hz line: 90 dB with minimum filtering

ENVIRONMENTAL

Operating Temperature: 0°C to 55°C
Storage Temperature: -40°C to 85°C
Relative Humidity: 95% at 40°C, noncondensing

OPERATING POWER

Voltage (std): 85 to 264 Vac, 90 to 370 VDC
Voltage (opt): 8 to 28 Vac, 9 to 37 VDC

EXCITATION POWER SUPPLIES

Outputs: 5 VDC, 5%, 200 mA max.
10 VDC, 5%, 120 mA max.
24 VDC, 5%, 50 mA max.

PANEL CUTOUT

Height: 1.77
Length: 3.62