

MULTIFUNCTION METER FOR BATCH CONTROL, RATE INDICATION, AND TOTALIZATION

DPF5100 Series

Starts at
\$380



MONOGRAM™ SERIES



DPF5200, \$445, shown smaller than actual size, with FP7000A Series paddlewheel flow sensor, \$200, sold separately, visit omega.com/fp7000

- ✓ 5-Year Warranty
- ✓ Frequency Ratemeter
- ✓ Up or Down Totalizer/ Batch Controller
- ✓ RS232C and HI, LO, and GO Open-Collector Outputs
- ✓ Analog Output for Rate or Total (Optional)

The DPF5100 Series microprocessor-based, 6-digit, 1/2 DIN panel meters can be configured by front-panel keys or via a PC as a frequency meter/tachometer, frequency-ratio meter, period/period-average meter, time-interval/time-interval-average meter, reset stopwatch, or cumulative timer or totalizer/1-stage batch controller.

Five Operating Modes

In the frequency meter, the minimum display update rate is equal to 1 period of the frequency input. Thus, very low frequency measurements are displayed and updated faster than on most conventional frequency meters. Only 2 sensors are required to measure the rate of a moving object. The DPF5100 can be set up as a frequency-ratio meter, ideal for monitoring flow ratios.

The DPF5100 can also function as an up or down totalizer/1-stage batch controller at rates up to 7 MHz. The display capacity is -99,999 to 999,999 counts, with exponential format up to 9.99 E9. The latest reading is automatically saved in non-volatile RAM and is restored on power-up.

SPECIFICATIONS

TTL Input

Protection Levels

(Jumper-Selectable): 7 MHz, 0 to 5V; 100 kHz, -20 to 25V; 3 kHz, -20 to 25V

Isolated Input

Sensitivity (Square-Wave Input):

±10 mV, 0 to 1 kHz; ±25 mV, 0 to 1 kHz; ±50 mV, 100 kHz (DPF5300)

NPN or PNP Open-Collector Sensor

Excitation Output: 12.4V @ 20 mA

Common Specifications

All Input Types

Number of Inputs: 1 or 2 (2 inputs for frequency ratio and time interval only)

Update Rate: 60 ms to 99.99 s; field programmable

Operation Modes

Frequency/Tachometer Mode

Frequency Range: 10⁻⁶ Hz to 7 MHz

Accuracy at 25°C/77°F

(Square Wave): ±0.0002% (2 ppm)

Totalizer Display-Offset (Preset):

-99,999 to 999,999

Isolated Analog Input

Accuracy: Better than 99.9%

Non-Linearity: 0.05% FS

Isolation: 350 Vdc between output and input

Power: 115 Vac ±10%, 47 to 400 Hz; optional 230 Vac, 10 to 32 Vdc

AC Frequency: 49 to 440 Hz

Power Consumption, Typical: 3 W

Battery Backup: User-supplied 6 to 12 Vdc; 60 mA to maintain operation, 400 mA with display

Dimensions: 48 H x 96 W x 150 mm D (1.9 x 3.8 x 5.9")

Cutout: 45 H x 92 mm W (1.8 x 3.6")

On/Off Control and Alarm Outputs

Standard: 3 open-collector transistors, rated 150 mA sink, 30V

Relay (Optional): 2 form "C" relays (SPDT) rated 6 A, 30 Vdc, or 240 Vac, resistive load (for rate alarm or batch control)

Analog Output (Optional): Isolated, scalable, internally powered and field selectable for 0 to 10V, 4 to 20 mA or 0 to 20 mA; rangeable over 4 leftmost or rightmost digits; suitable for rate or total display

Min Impedance for 10V: 500 Ω

Max External Impedance for 20 mA: 600 Ω

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model No.)

MODEL NO.	PRICE	DESCRIPTION
DPF5100	\$380	Meter for 2 TTL/CMOS inputs
DPF5200	445	Same as DPF5100, with sensor excitation for 1 channel
DPF5300	475	Meter with conditioner for 1 low-level and 1 TTL/CMOS input
DPF5400	490	Meter with conditioner for 2 channels
DPF5500	515	Meter for analog mA and voltage inputs (1 channel)

Comes complete with operator's manual.

Ordering Example: DPF5100-A, meter with analog output, \$380 + 155 = \$535.

POWER AND OUTPUT OPTIONS

ORDER SUFFIX	ADD'L PRICE	DESCRIPTION
-A	\$155	Analog output*
-BCD	110	BCD output*
-R	80	6 A dual relays*
-10/32VDC	80	10 to 32 Vdc power
-230VAC	N/C	230 Vac power

* These options are mutually exclusive.

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
DPF6D	\$28	PC-compatible menu-driven setup program for RS232C output



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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters