MULTIFUNCTION METER FOR BATCH CONTROL, RATE INDICATION, AND TOTALIZATION

MONOGRAM™ SERIES

DPF5100 Series

5 YEAR WARRANTY CE

DPF5200, shown smaller than actual size, with FP7000A Series paddlewheel flow sensor, 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, ⅛ 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

To Order *Visit omega.com/dpf5100 for Pricing and Details*

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

Comes complete with operator's manual.
***Ordering Example: DPF5100-A,** meter with analog output.*

POWER AND OUTPUT OPTIONS

ORDER SUFFIX	DESCRIPTION
-A	Analog output*
-BCD	BCD output*
-R	6 A dual relays*
-10/32VDC	10 to 32 Vdc power
-230VAC	230 Vac power

* These options are mutually exclusive.

ACCESSORY

MODEL NO.	DESCRIPTION
DPF6D	PC-compatible menu-driven setup program for RS232C output