

RATE/TOTAL/ BATCH METERS

DPF401 Series

Starts at
\$395

DPF401, \$395,
shown smaller
than actual size.



- ✓ 5-Year Warranty
- ✓ Simultaneous Display of Rate and Total
- ✓ Batch Controller
- ✓ Real-Time Clock
- ✓ Square-Root Option
- ✓ Isolated BCD Option
- ✓ 5 Open-Collector Outputs Standard
- ✓ Red or Green Display

The DPF400 Series comprises 6-digit multifunction process indicators/controllers. Each unit can easily be configured via the front-panel pushbuttons or optional serial communication boards as a ratemeter/totalizer, batch controller, or real-time clock.

Rate may be displayed in engineering units. In addition, average rate, a running average that works like a filter, can help eliminate noise yet does not introduce a long delay for a step change in the input frequency response. With the optional analog input board, the DPF400 meters can accept a signal, such as 4 to 20 mA DC, from any typical differential flow transmitter and extract the square root of this signal, displaying the result in any engineering units desired.

The DPF400 Series meters can also function as single input batch controllers that can simultaneously count the batch, number of batches completed, and the total number of pulses received. An internal timer for process time measurement displays in HH, MM, or SS format.

SPECIFICATIONS

Accuracy: $\pm 0.1\%$ @ 15 to 35°C (59 to 95°F)

Step Response: 10 to 90% FS, 50 ms

Turndown Ratio: Max offset divided by minimum span, 1000 with 0.1% resolution; 100 with 0.01% resolution signal conditioners (non-isolated TTL-level pulse input standard)

Threshold: 0.7 to 2.0V

Frequency Ranges: 0.2 Hz to 20 kHz

Protection Level: 24V

Trigger Slope: Positive

Sensor Excitation (NPN): 16 to 30V @ 70 mA non-regulated isolated pulse input with excitation (voltage input and passive magnetic pickup most popular)

Connection: Plug-in screw terminal

Maximum Signal: 60 Vrms with protection to 240V

Sensitivity: 20 mVrms

Input Impedance: 75 k Ω

Hysteresis: 50 mV

NPN Open-Collector Input

Connection: Plug-in screw terminal

Sensor Excitation: 12V regulated

NAMUR Input Connection:

Plug-in screw terminal

Sensor Excitation: 8.2V

Internal Load/Source

Impedance: 1 k Ω

Activated: <1 mA

Deactivated: >3 mA

Contact-Closure Input

Connection: Plug-in screw terminal

Sensor Excitation: 12V regulated
Frequency Range: 10 on/off per second

Isolated Analog Input (Optional)

Connection: Plug-in screw terminal
Signal Range(s): 0 to 5 Vdc, 1 to 5 Vdc, 0 to 10 Vdc, 0 to 1 mA DC, 4 to 20 mA DC isolation; SIG GND to DIG GND: 354 Vp

Low-Level Shut-Off: Programmable

Non-Linearity Max: 0.3% FS

Accuracy at 25°C (77°F): 0.05% FS

Temperature Coefficient:

50 ppm/°C

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

MODEL NO.	PRICE	DESCRIPTION
DPF401	\$395	TTL/open collector/contact closure input meter, includes 16V @ 70 mA output power
DPF402	470	Low-level pulse input meter includes 12V @ 70 mA output power or 8.2V with 1 k Ω source impedance
DPF403*	590	4 to 20 mA/0 to 5 Vdc/1 to 5 Vdc (field-selectable) input meter, includes nominal 24V @ 25 mA output power.

* **Note:** 0 to 10 Vdc and 0 to 1 mA inputs optionally available for DPF403, add suffix "-10VINP" or "-1MA", no additional charge.

DISPLAY AND POWER OPTIONS

ORDER SUFFIX	Add'l PRICE	DESCRIPTION
-GR	N/C	Green display
-230V	N/C	230 Vac power

OUTPUT BOARDS AND COMMUNICATIONS OPTIONS

MODEL NO.	PRICE	DESCRIPTION
DPF400-A3	\$110	Analog output board
DP40-B*	110	Isolated BCD output board
DP40-R*	75	Dual 7A mechanical relays
DP40-S24†	110	Isolated RS232/485 communications

* Both options are not available in one unit.

† Communications options include 1.8 m (6') communications cable which plugs into the rear of the DPF400 and terminates with a phone plug. For proper termination to a computer, a 9-pin and 25-pin connector which mates with the phone plug, is offered, visit omega.com/dpf400 for details.

Comes complete with gray BUMPER BAND® protective guard and operator's manual.

Ordering Examples: DPF401, meter for TTL level input, \$395.

DPF402-GR, low level pulse input meter with optional green display, \$470.

ACCESSORY

ORDER SUFFIX	PRICE	DESCRIPTION
DPP-5	\$525	1/8 DIN panel punch



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