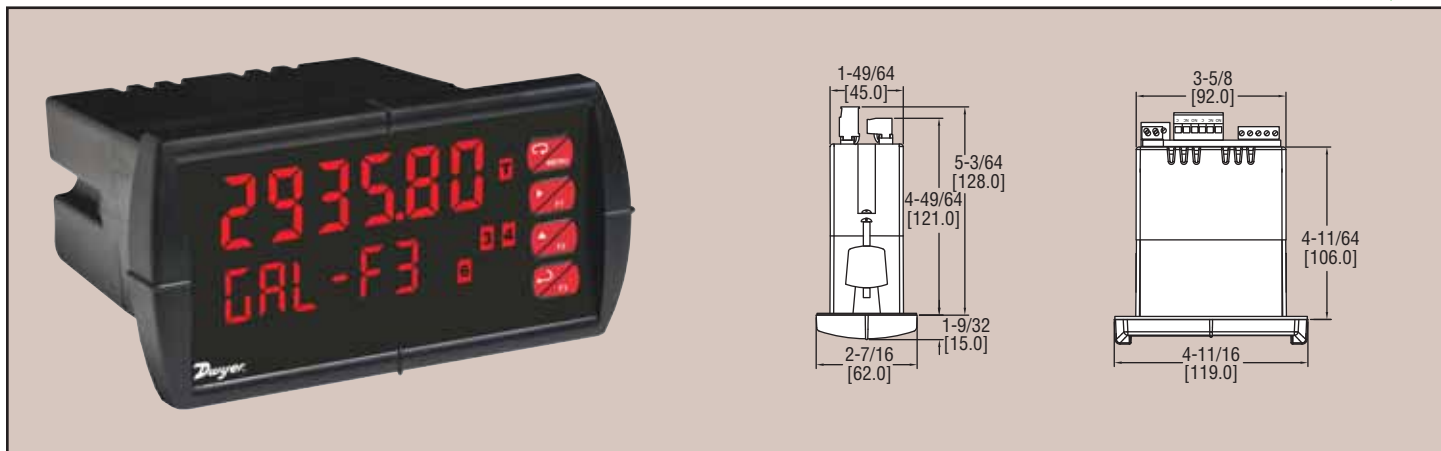




Series
PPM

Pulse Panel Meter

1/8 DIN, Dual-Line 6-Digit Display, Flow Rate and Totalizer



FLOW

The Series PPM has a unique, rugged, NEMA 4X front panel design that makes it nearly impenetrable in typical applications. The weatherproof, UV resistant, large, dual line display allows for more information, making it easier to read and simpler to program. The intensity of the display can be adjusted allowing this meter to be utilized in dark rooms as well as outdoors, due to its sunlight readable display. It features up to eight visual alarm set points to trigger certain events and three function keys which can be programmed to provide direct menu access. With up to four relays available, the PPM features latching, non-latching, sampling, pump alteration control, and a failsafe action. Offering programmable delay time, this meter prevents recognition of false maximum or minimum reading which may be caused by the start-up or unusual process events. The PPM provides three security passwords that restrict modification of programmed settings. This unit has the ability to obtain non-linear input signals and linearize them with a general purpose 32-point linearizer. Choose from RS-232, RS-422/485 serial communication options or any available expansion modules, accessories, and enclosures.

The PPM displays flow rate and total simultaneously, with a programmable relay and 4 to 20 mA option for flow rate or flow total. The PPM is a 1/8 DIN digital panel meter specifically designed for displaying flow rate and total from a pulsed input provided by open collector, NPN, PNP, TTL, switch contact, sine wave, or square wave.

FEATURES

- Three levels of password protection
- Gate function for rate display of slow pulse rates
- Rate displayed as units per second, minute, hour, or day
- K-factor calibration or scale with up to 32-point linearization
- Total, grand total or non-re-settable grand total
- Two or four relays & isolated 4 to 20 mA output options
- External 4-relay & digital I/O expansion modules
- RS-232, RS-422/485 serial communication options

FLOW RATE

The PPM is particularly well-suited for flow applications because its six-digit, dual-line display can be programmed for a wide variety of display configurations. For instance, the upper line can display either flow rate, total or grand total, and the lower line can display flow rate, total, grand total, or engineering units. Among other things, this makes it possible to display either flow rate and total, or total and grand total at the same time, a very unique feature on 1/8 DIN digital panel meters.

ACCESSORIES See Series PMA
ENCLOSURES See Series PME

SPECIFICATIONS

Input: Field selectable: Pulse or square wave 0 to 5V, 0 to 12V, or 0 to 24V @ 30 kHz; TTL; open collector 4.7 kΩ pull-up to 5V @ 30 kHz; NPN or PNP transistor, switch contact 4.7 kΩ pull-up to 5V @ 40 Hz.

Input Impedance: 50 to 100 Ω.

Accuracy: ±0.03% of calibrated span ±1 count.

Power Requirements: 85 to 265 VAC 50/60 Hz, 90 to 265 VDC, 20 W max or 12 to 24 VDC ± 10%, 15 W max.

Display: Dual-line 6-digit display, 0.60" and 0.46".

Decimal Points: 5-positions, user selectable.

Temperature Limits:

Operating: -40 to 149°F (-40 to 65°C);

Storage: -40 to 185°F (-40 to 85°C).

Enclosure Rating: NEMA 4X, IP65 front.

Electrical Connections: Removable screw terminal blocks accept 12 to 22 AWG wire, RJ45 for external relays, digital I/O, and serial communication adapters.

Output Signal: 4 to 20 mA.

Switch Rating: 2 or 4 SPDT (Form C) internal and/or 4 SPST (Form A) external; rated 3A @ 30 VDC and 125/250 VAC resistive load; 1/14 HP @ 125/250 VAC for inductive loads.

Power Supply:

85 to 265 VAC models: 200 mA @ 24 VDC;

12 to 24 VDC models: 100 mA @ 24 VDC;

Second supply with output 2 models: 40 mA @ 24 VDC.

Time Delay: 0 to 999.9 seconds, on & off relay time delays programmable and independent for each relay.

Shipping Weight: 9.5 oz (269 g).

Agency Approvals: CE, UL, RoHS.

Model	Power	Output 1	Output 2
PPM-100	85 to 265 VAC	None	None
PPM-101	85 to 265 VAC	None	4 to 20 mA
PPM-120	85 to 265 VAC	2 relays	None
PPM-121	85 to 265 VAC	2 relays	4 to 20 mA
PPM-140	85 to 265 VAC	4 relays	None
PPM-141	85 to 265 VAC	4 relays	4 to 20 mA
PPM-200	12 to 24 VDC	None	None
PPM-201	12 to 24 VDC	None	4 to 20 mA
PPM-220	12 to 24 VDC	2 relays	None
PPM-221	12 to 24 VDC	2 relays	4 to 20 mA
PPM-240	12 to 24 VDC	4 relays	None
PPM-241	12 to 24 VDC	4 relays	4 to 20 mA