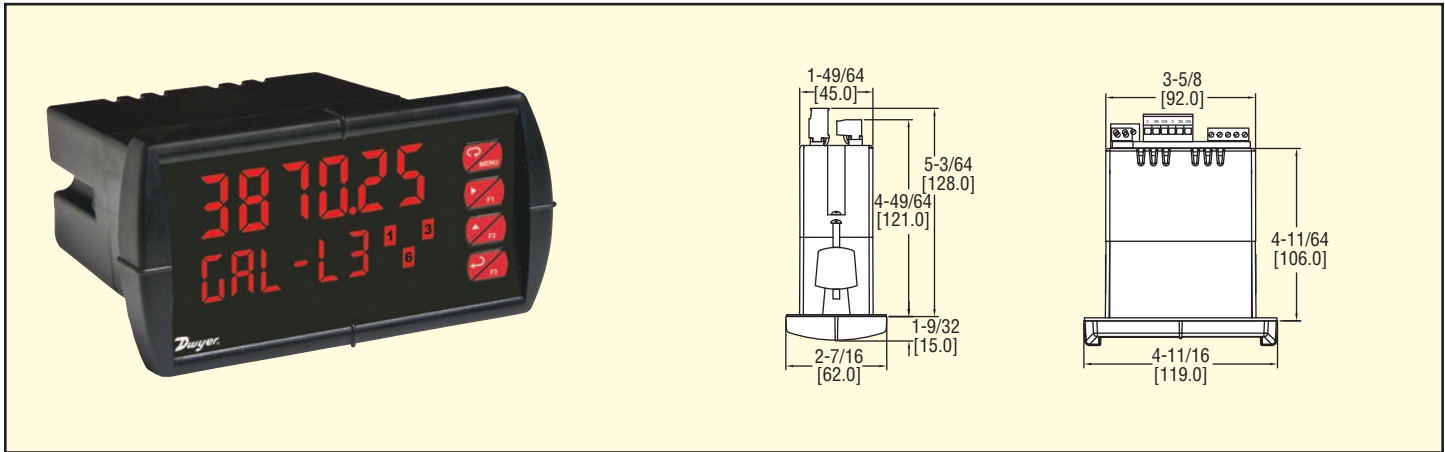




Series  
MPM

# Multi Panel Meter

1/8 DIN, Dual-Line 6-Digit Display, Multi-Pump Alternation Control



The Series MPM 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 MPM features latching, non-latching, sampling, pump alteration control, and a fail-safe 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 MPM provides three security passwords that restrict modification of programmed settings. The MPM has the ability to obtain non-linear input signals and linearize them with simple to use math functions such as square-root extractor, weirs and flumes exponential linearizer, horizontal round tank linearizer or general purpose 32-point linearizer. Unit accepts 0 to 20 mA, 4 to 20 mA, 0 to 5V, or  $\pm 10V$  inputs and requires 85 to 265 VAC or 12/24 VDC power supply. Choose from RS-232, RS-422/485 serial communication options or any available expansion modules, accessories and enclosures.

## FEATURES

- Three levels of password protection
- Math functions for flow & round horizontal tanks
- 32-point, square root or exponential linearization
- Multi-pump alternation control
- 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

## PUMP CONTROL

Providing two or four contact output options, the MPM can be used as a programmable pump controller when used with any Dwyer level transmitter. The relay capabilities of this meter expand its usefulness beyond simple indication to provide the user with alarm and pump control.

## SPECIFICATIONS

**Input:** 0 to 20 mA, 4 to 20 mA, 0 to 5 V, 1 to 5 V or  $\pm 10 V$ .

**Input Impedance:** 50 to 100  $\Omega$ .

**Accuracy:**  $\pm 0.03\%$  of calibrated span  $\pm 1$  count, square root & programmable exponent accuracy range: 10 to 100% of calibrated span.

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

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

**Decimal Points:** 5-position, user selectable.

**Temperature Limits:**

Operating:  $-40$  to  $149^\circ F$  ( $-40$  to  $65^\circ C$ );

Storage:  $-40$  to  $185^\circ F$  ( $-40$  to  $85^\circ C$ ).

**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 Consumption:**

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, RoHS, UL.

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

Accessories: See page 349 (Series PMA)  
Enclosures: See page 350 (Series PME)