# **Ratemeter - Model PM6-FX**



## Description

The PM6 panel mount display features easy to use set up programming functions. Changes to the scaling and other program settings are made using three pushbuttons located at the rear of the instrument.

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The PM6-FX accepts pulse inputs and may be scaled to read directly in your engineering units. The PM6-FX can accept its input pulses from most common sensor types such as NPN, PNP, switch contact, magnetic pickup output, TTL, CMOS etc. type devices.

Applications include flow rate, litres/hr, RPM, bottles/min, wind speed etc.

A display hold external input is provided. The instrument has a 5V transmitter supply on all models plus a 24VDC unregulated transmitter supply on AC powered models.

User selectable low and/or high frequency values can be programmed and display blanking used as a warning that these values have been exceeded. A special feature of the PM6 is the programmable display brightness, which allows the display intensity to be reduced to conserve power or to reduce glare in darker areas.

Your choice of legend (e.g. R.P.M.) can be printed on the front of the instrument.

The PM6 is packaged in a rugged industrial  $\frac{1}{8}$  DIN panel mount enclosure, with a behind panel depth of only 115mm. Electrical connections are made via plug in type screw terminals for ease of installation, maximum wire diameter 2.5mm<sup>2</sup>.



## **Features**

- Functions as ratemeter/tachometer
- Input frequency up to 10kHz
- 4 digit high brightness LED display
- Large 20mm high digits
- Display viewing distance up to 10m
- Programmable display brightness
- Easily scaled to read in engineering units
- Can be scaled without the need for test equipment or special tools
- Adjustments by rear pushbuttons
- Calibration and set up data stored in EEPROM
- Programmable decimal point
- Programmable digital filter
- Leading zero blanking
- Visual user selectable low and/or high frequency limit warning via display blanking
- "Low range" function allows input down to 0.25Hz without the annoying flashing between the indication and zero readings often associated with low frequency inputs
- Inbuilt transmitter supply, +5VDC or unregulated 18 to 24VDC. (unregulated. supply on AC powered models only)
- 240 V, 110V, 32V, 24V AC, non isolated 12 to 24V DC or isolated 12 to 48V DC or 50 to 110 VDC (factory configured)
- Plug-in screw electrical terminals
- DIN size 48mm x 96mm bezel
- State of the art microprocessor design
- Computer tested and pre-calibrated
- High reliability surface mount electronics

# **Specifications and Ordering Information**

Specifications are subject to change without notice

## **TECHNICAL SPECIFICATIONS**

Input:	Selectable types inc: NPN, PNP, switch contact, magnetic pickup output from TTL or CMOS etc.	Transmitter supply:	5VDC regulated - all models or 18 to 24VDC unregulated, (20mA maximum) - AC models only
Frequency range:	10kHz Max. 0.25Hz Min.	PHYSICAL CHARACTERISTICS	
Signal voltage:	48VDC or RMS Max. 100mV Min.	Bezel size:	DIN 48mm x 96mm x 10mm
		Case size:	44mm x 91mm x 120mm
Input impedance:	10ΚΩ		behind face of panel
Display update:	4/sec. nominal (depends on settings)	Panel cut out:	45mm x 92mm +1mm &- 0mm
		Connections:	Plug in screw terminals
Measurement:	Reciprocal time period technique		(max 2.5mm <sup>2</sup> wire)
		Weight:	400 gms unpacked
Microprocessor:	MC68HC05C8 CMOS	ORDER CODE	
Ambient temp:	-10 to 60 <sup>0</sup> C	240VAC powered:	PM6-FX-240-4E
Humidity:	5 to 95% non condensing	110VAC powered:	PM6-FX-110-4E
Display type:	4 digit red 20mm digit height	32VAC powered:	PM6-FX-32-4E
Power supply:	240V, 110V, 32V, 24V AC non isolated 12 to 24V DC or isolated 12-48V DC or 50-110 VDC (factory configured)	24VAC powered:	PM6-FX-24-4E
		12-48VDC powered (isolated):	PM6-FX-DC-4E
Power usage:	AC supply 2VA + transmitter current DC supply 2W + transmitter current	50-110VDC powered:	PM4-FX-DCH-4E
		12-24VDC powered (non isolated):	PM6-FX-DCN-4E

## PANEL MOUNT INSTALLATION



**INSTRUMENT DIMENSIONS** 

## **ELECTRICAL CONNECTIONS**

