

Panel Mount Indicators

PM4-IV3 3 channel scanning with arithmetic functions

Scalable indication of $\pm 20\text{mA}$, 4-20mA, $\pm 1\text{VDC}$, $\pm 10\text{VDC}$ or $\pm 100\text{VDC}$



PM4 displays



4 digit LED 20mm digit height



4 digit LCD 12.7mm digit height



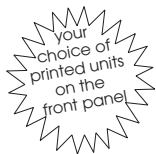
5 digit LED 14.2mm digit height



6 digit LED 14.2mm digit height



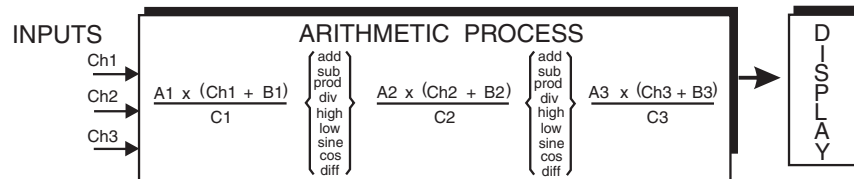
6 digit LCD 12.7mm digit height



Description

The PM4-IV3 accepts inputs of $\pm 20\text{mA}$, 4 to 20mA, $\pm 1\text{v}$, $\pm 10\text{v}$ or $\pm 100\text{v}$. and may be programmed to operate as a 3 input scanning monitor or an arithmetic process monitor.

In scanning mode the instrument scans and displays each input at a programmable rate (0 to 240 seconds). In arithmetic mode the three inputs (Ch1, Ch2 & Ch3) can be combined arithmetically using the versatile formula below. The display shows the result but each input can be viewed separately.



The instrument is ideal for situations requiring multi-input calculations such as:- power measurement, density correction, temperature compensation measurements, flow combining from more than one source, ratios etc.

The instruments feature flexible pushbutton calibration and programming. The programmable digital filter improves stability by smoothing out short term interference. The display brightness can be adjusted. Each instrument is supplied with a single control/alarm relay. Electrical isolation between power supply, input voltage/current signal and retransmission eliminates grounding and common mode voltage problems.

Features

- Accepts $\pm 20\text{mA}$, 4 to 20mA, $\pm 1\text{V}$, $\pm 10\text{V}$ or $\pm 100\text{V}$
- Pushbutton calibration and setup
- Displays in engineering units
- Versatile arithmetic process (all A,B and C values may be programmed separately).
- Scanning mode allows up to 3 separate inputs to be scanned and displayed
- Allows many common control and monitoring conditions such as density correction, flow combining, input to output differences etc. from up to 3 inputs to be calculated and displayed
- 240V, 110V, 32V, 24V AC, 12 to 48 V DC or 50 to 110 V DC (factory configured)
- Alarm/control relay output
- 2 year guarantee



Circular graph and 5 digit display



20 segment bargraph and 5 digit display

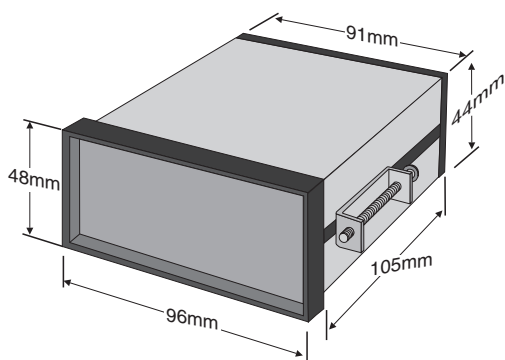
PM4IV3-3.2-0

Specifications

Technical Specifications

Input types:	Link selectable $\pm 20\text{mA}$, 4 to 20mA or DC Volts $\pm 1\text{V}$, $\pm 10\text{V}$, $\pm 100\text{V}$
Maths functions:	Add, subtract, product, divide, maximum, minimum, sine & cosine
Impedance:	80 Ω nominal (4 to 20mA) 1M Ω on DC voltage
ADC resolution:	1 in 20,000
ADC conversion:	Dual slope ADC
Accuracy:	0.1% of FS when calibrated
Sample rate:	1/2 sec per channel
Microprocessor:	MC68HC11 CMOS
Ambient temp:	LED models -10°C to 60°C, LCD models -10°C to 50°C
Humidity:	5% to 95% non condensing
Display types:	LED models: 4 digit 20mm, 5 digit 14.2mm, status LEDs, keypad. 6 digit 14.2mm + 4 way keypad LED bar graph 20 segment bar + 5 digit display + 4 way keypad 16 segment circular "bargraph" + 5 digit display + 4 way keypad LCD models: 4 digit 12.7mm or 6 digit 12.7mm
Power supply:	240, 110, 32, 24VAC 50/60Hz, 12 to 48VDC or 50 to 110VDC (factory configured)
Power usage:	AC supply 4 VA max, DC supply, consult supplier
Output (standard):	1 x relay, form A, rated 5A resistive
Relay action:	Programmable N.O. or N.C.
Output Options	
Extra relays:	Same specs as relay 1 (form C optional)
Retransmission:	Analog 4 to 20mA, 0 to 1VDC or 0 to 10VDC link selectable (single or dual channel versions) Serial RS232 or RS485, choice of ASCII or Modbus RTU protocols Digital Binary or BCD
DC voltage out:	Isolated 24V ($\pm 12\text{V}$), 20mA
Physical Characteristics	
Bezel size:	DIN 48mm x 96mm x 10mm
Case size:	44mm x 91mm x 115mm behind face of panel
Panel cut out:	45mm x 92mm (+1mm & -0mm)
Connections:	Plug in screw terminals (max 2.5mm ² wire)
Weight:	400g basic model, 450g with option card

PM4-IV3 case dimensions



PM4-IV3 Order Codes

PM4-IV3 - [] - [] - []	
Power Supplies	
PM4-IV3 - [XXX] - [] - []	
240VAC	[240]
110VAC	[110]
32VAC	[32]
24VAC	[24]
12 to 48VDC	[DC]
50 to 110VDC	[DCH]
Display Type	
PM4-IV3 - [] - [XXX] - []	
4 DIGIT LED	[4E]
5 DIGIT LED + KEYPAD & ALARM LEDs	[5E]
6 DIGIT LED + KEYPAD	[6E]
BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	[5BP]
CIRCULAR BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	[5GP]
4 DIGIT LCD	[4C]
6 DIGIT LCD	[6C]
Options	
PM4-IV3 - [] - [] - [XXX]	
ANALOG (4-20mA, 0-1V or 0-10V selectable)	[A]
DUAL ANALOG (4-20mA, 0-1V or 0-10V selectable)	[AA]
RS232	[2]
RS485	[4]
BCD/Binary NPN	[DN]
BCD/Binary PNP	[DP]
DC VOLTAGE OUTPUT 24V ($\pm 12\text{V}$)	[12]
1 EXTRA RELAY	[R]
3 EXTRA RELAYS	[RRR]

PM4-IV3 Accessories

Description	Model No.
IP65 access cover	COVER-IP65
Wall mount enclosure	ENC-PM1-01
Wall mount encl. with IP65 cover	ENC-IP65-PM1-01
Surface mount kit	PM4-OPT-SMKIT
Portable/bench enclosure AC	ENC-PM-AC
Portable/bench enclosure DC	ENC-PM-DC

PM4-IV3 panel mounting details

