

## PM-1 Digital Pressure Indicator

### FEATURES

- Single or dual pressure measurement display
- Digital interface capability via RS232 interface
- Large LCD display
- Pressure modules permanently installed (PPT-1 and PPT-2)
- Pressure measurement accuracies of  $\pm 0.10\%$  to  $\pm 0.025\%$  of span, range dependent



**PM-1**  
Digital Pressure Indicator

### SPECIFICATIONS Reference Temperature: 70°F

Accuracy:	Based on module accuracy.
Process Connection:	1/8 NPT female
Calibration:	NIST traceable Calibration Certificate included for each pressure module
Recalibration:	Complete recalibration can be accomplished over instrument RS232 interface. Zero and span can be accomplished via front panel keypad.
Resolution:	$\pm 0.002\%$ of span (max.)
Repeatability:	$\pm 0.01\%$ of span (all psi ranges) $\pm 0.01\%$ of span (ranges of 1 through 200 in. H <sub>2</sub> O) $\pm 0.02\%$ of span (ranges below 1 in. H <sub>2</sub> O)
Operating Temp Range:	32 °F to 120 °F (0 °C to 49 °C) Temp. Comp.Range: 20 °F to 120 °F (0 °C to 49 °C)
Temperature Effect:	$\pm 0.004\%$ of span per °F over compensated range from reference temperature of 70 °F ( $\pm 3$ °F)
Optional Temp. Compensation:	Eliminates temperature error from 20 ° to 120 °F (-7 °C to 49 °C). Available only on PPM2 sensors.
Storage Temp.:	-4 °F to 158 °F (-20 °C to 70 °C)

### ORDERING CODE

#### Part Number

PM - Ashcroft® base unit; no sensors PM

#### Power Supply

1 - 110 Vac/60 Hz

2 - 220 Vac/50 Hz

3 - 100 Vac/60 Hz

4 - No power supply provided

#### Optional Features

L - Back Lit display

N - Nicad batteries

A - Alkaline batteries

H - Handle

P - Panel mounting hardware

R - Series 7 retrofit panel (option P will be required to mount this)

E - Non-standard engineering units

**PM 2 L N P R**

Media:	PPM1: Sensor Type: Clean, dry, non-conductive, non-corrosive gas PPM2: Sensor Type: Any medium compatible with 316 Stainless steel
Overpressure:	PPM1 - Low pressure sensors Under/Overpressure capability -15 to 50 psi Maximum static (line) pressure 100 psi PPM2 - Medium/High pressure sensors Overpressure capability 200% for ranges up to 1000 psi 150% for ranges over 1000 psi
Display:	Liquid crystal
Case Material:	High Impact ABS, black
Power Requirements:	Standard: ac adapter provided for operation off standard 110 Vac, 60 Hz supply Optional: 220 Vac, 50Hz, 100 Vac, Nicad or alkaline battery pack
Push Button Keypad Functions Include:	Zero adjust, 12 Standard engineering unit select, Tare function, Min/Max recall, Print, Damping, Port select, Display hold,
Dual sensor modes:	Add or subtract pressure applied to one module from the second module (differential pressure)
Field Recalibratable:	Yes
Warm Up:	5 Min. to rated accuracy 30 Min. to complete stability
Display Size:	2 Line, 0.38" height per line 16 alpha or numeric characters per line (Max)
Display Update:	100 ms

## PPM-1 Gauge, in. H<sub>2</sub>O, Differential Pressure Modules

ORDERING CODE	Example:	PPM	1	C	A	D	INWC/	100	A
<b>Model</b>									
PPM - Heise pressure sensor		PPM							
<b>Sensor Type</b>									
1 - Capacitive sensor — Low pressure 0.25-200 in H <sub>2</sub> O			1						
<b>Sensor Accuracy</b>									
B - ±0.1% Accuracy (STD.)									
C - ±0.06% Accuracy (STD.) ("C" accuracy is ±0.06% for ranges 1.0 in H <sub>2</sub> O and higher)				C					
C - ±0.07% Accuracy (STD.) ("C" accuracy is ±0.07% for ranges below 0.5 in H <sub>2</sub> O and bolded values in range table)									
<b>Media Compatability</b>									
A - Non-isolated sensor, clean dry gas					A				
<b>Pressure Type</b>									
C - Compound									
D - Differential						D			
<b>Pressure Units</b>									
INWC							INWC/		
<b>Ranges</b>									
<b>Differential</b>									
0.25 - IWC (in. H <sub>2</sub> O)									
0.5 - IWC (in. H <sub>2</sub> O)									
1.0 - IWC (in. H <sub>2</sub> O)									
2.0 - IWC (in. H <sub>2</sub> O)									
3.0 - IWC (in. H <sub>2</sub> O)									
5.0 - IWC (in. H <sub>2</sub> O)									
10 - IWC (in. H <sub>2</sub> O)									
15 - IWC (in. H <sub>2</sub> O)									
25 - IWC (in. H <sub>2</sub> O)									
50 - IWC (in. H <sub>2</sub> O)									
100 - IWC (in. H <sub>2</sub> O)								100	
150 - IWC (in. H <sub>2</sub> O)									
200 - IWC (in. H <sub>2</sub> O)									
<b>Compound</b>									
0.125 - IWC (in. H <sub>2</sub> O)									
0.25 - IWC (in. H <sub>2</sub> O)									
0.50 - IWC (in. H <sub>2</sub> O)									
1.0 - IWC (in. H <sub>2</sub> O)									
1.5 - IWC (in. H <sub>2</sub> O)									
2.5 - IWC (in. H <sub>2</sub> O)									
5.0 - IWC (in. H <sub>2</sub> O)									
7.5 - IWC (in. H <sub>2</sub> O)									
12.5 - IWC (in. H <sub>2</sub> O)									
25 - IWC (in. H <sub>2</sub> O)									
50 - IWC (in. H <sub>2</sub> O)									
75 - IWC (in. H <sub>2</sub> O)									
100 - IWC (in. H <sub>2</sub> O)									
<b>Inlet Fitting</b>									
A - 1/8 NPT Female									A

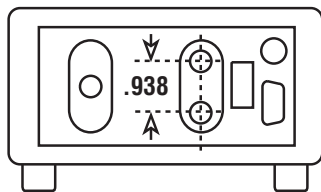
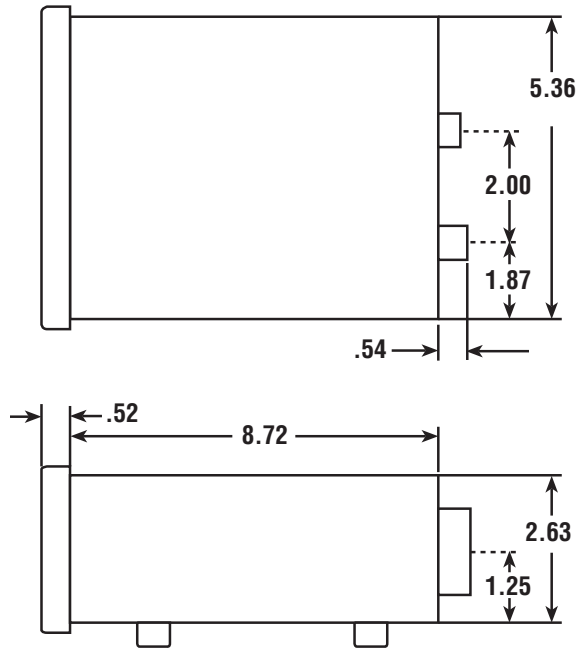
# PPM-2 Gauge, Absolute Pressure Modules

ORDERING CODE	Example:	PPM	2	C	I	G	PSI	100	A
<b>Model</b>									
PPM - Heise pressure sensor		PPM							
<b>Sensor Type</b>									
2 - Piezoresistive sensor — High pressure 5 psi to 10,000 psi			2						
<b>Accuracy</b>									
B - ±0.1% accuracy (STD.)									
C - ±0.05% accuracy (STD.)				C					
D - ±0.025% accuracy (STD.)									
F - ±0.1% Enhanced temperature compensation 20°F to 120°F									
G - ±0.05% Enhanced temperature compensation 20°F to 120°F									
H - ±0.025% Enhanced temperature compensation 20°F to 120°F									
<b>Media Compatibility</b>									
I - Isolated (no special cleaning)					I				
W - Clean to ASME B40-100 Level IV									
<b>Pressure Type</b>									
G - Gauge						G			
A - Absolute									
V - Vacuum									
C - Compound									
<b>Pressure Units</b>									
psi							PSI		
<b>Ranges</b>									
<b>Isolated</b>									
5 - 5 psi									
10 - 10 psi									
15 - 15 psi									
20 - 20 psi									
25 - 25 psi									
30 - 30 psi									
50 - 50 psi									
60 - 60 psi									
100 - 100 psi								100	
150 - 150 psi									
200 - 200 psi									
250 - 250 psi									
300 - 300 psi									
500 - 500 psi									
600 - 600 psi									
1000 - 1,000 psi									
1500 - 1,500 psi									
2000 - 2,000 psi									
2500 - 2,500 psi									
3000 - 3,000 psi									
5000 - 5,000 psi									
6000 - 6,000 psi									
7500 - 7,500 psi									
10000 - 10,000 psi (gauge only)									
<b>Vacuum</b>									
15 - 15 psi									
<b>Compound</b>									
10 - ±10 psi									
15 - ±15 psi									
30 - ±30 psi									
60 - ±60 psi									
<b>Inlet Fitting</b>									
A - 1/8" NPT Female (STD.)									A
B - 1/8" NPT Female w/flush port									
C - G 1/8" BSP inlet manifold									
D - G 1/8" BSP inlet w/flush port									

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## DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings



Panel Cutout: 5.41" x 2.68"  
Weight: 3.0 lbs (with 2 modules installed)