



NOW AVAILABLE
IN 0.025%
ACCURACY!

**Pressure Master
Model PM, Dual Display
LCD Digital Pressure Indicator**

STANDARD FEATURES

- **Push-button zero adjust**
- **Max/min memory**
- **Selectable engineering units**
- **Variable damping**
- **Tare**
- **Port select**
- **Push-to-print**
- **RS232 I/O**
- **High static DP capability**

OPTIONAL FEATURES

- **Backlit display**
- **Rechargeable battery pack**

The Heise® PM indicator is an extremely versatile pressure measurement and test instrument. It can simultaneously display the output of two pressure sensors, two RTD's or one of each. It offers 12 standard user selectable engineering units and one custom value. Other dedicated front panel buttons make it easy to set zero, check max/min values, adjust measurement damping, select either or both ports for standard display, additive or differential display, print the display and configure the RS232 output. All front panel features are accessible via the RS232 port for remote configuration or data acquisition.



PRODUCT SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Dimensions
7.72 in. (L) x 6 in. (W) x 2.95 in. (H)

Panel Cutout
5.4 in. x 2.68 in.

Weight
Depending on configuration
Max. <4 lbs. w/2 sensors and battery pack

Case Material
High impact ABS

Sensor Capacity
2 bays for Heise PPM sensors

Display
2 line LCD, 0.038 in. height per line. Can display simultaneous readings from 2 modules.

Options
Backlit Display
Built-in NiCad Rechargeable Battery Pack
Handle
Panel Mounting Brackets

OPERATING SPECIFICATIONS

Operating Temperature Range
32° to 120°F

Storage Temperature
-4° to 158°F

Update Rate
130 ms (nominal) with one sensor installed

Resolution
±0.002% of span, 60,000 counts (max)

Power Requirements
Standard: ac adapter provided for 110Vac/60 Hz
Available: ac adapter provided for 220Vac/50 Hz
ac adapter provided for 100Vac/60 Hz
Optional: Built-in rechargeable NiCad Battery Pack*

* (Life: 25 hours nominal without backlit LCD, 5 hours nominal with backlit LCD. Activating RS232 results in approximately 30% reduction in battery life.)

Certification
N.I.S.T. Traceable certification document provided for base display unit and sensor modules

PRESSURE SENSOR SPECIFICATIONS

PPM-1

Pressure Types
Gauge, differential and compound

Available Ranges
(See Chart)

Available Accuracies
±0.06 (0/2-0/200 in. H₂O), ±0.07 (0/0.25-0/1 in. H₂O) or 0.1% of Span

Compensated Temperature Range
20°F to 120°F

Temperature Effect
±0.004% of Span per °F over compensated range (from reference temperature range of 70° ±3°)

Repeatability
±0.01% of span (range 0/1 in. H₂O or higher)
±0.02% of span (ranges below 0/1 in. H₂O)

Sensitivity
±0.002% of span (typical)

Media Compatibility
Clean, dry, non-conductive, non-corrosive gas

Under/Overpressure Capability
-15 to 50 psi

Maximum Static (line) Pressure
100 psi

Process Connection
Standard: 1/8 NPT female
Optional: G 1/8 British standard

PPM-2

Pressure Types
Gauge, absolute, compound and vacuum

Available Ranges
(See Chart)

Available Accuracies
±0.025, 0.05 or 0.1 % of Span (±0.025 & 0.05% not available on 0/10,000 psi range)

Compensated Temperature Range
20°F to 120°F

Temperature Effect
Standard: ±0.004% of Span per °F over the compensated range (from reference temperature range of 70° ±3°)
Optional: No additional error due to temperature over the compensated range

Repeatability
±0.01% of span

Sensitivity
±0.002% of span (typical)

Media Compatibility
0/5 psi range only: Clean, dry, non-conductive, non-corrosive gas
0/10-0/10,000 psi ranges: Any medium compatible with 316 SS isolation.
Optional: Cleaned for Oxygen Service (0/10-0/10,000 psi ranges only)

Overpressure Capability
200% for ranges up to 1000 psi
150% for ranges over 1000 psi

Process Connection
Standard: 1/8 NPT female
Optional: 1/8 NPT female with flush port (ranges 10 psi and over)
G 1/8 British standard
G 1/8 British standard with flush port (ranges 10 psi and over)
Welded VCR fitting with standard finish



RTD INTERFACE ASSEMBLY

PPM-RT1: Accommodates Pt100, Ni120, Cu120 and other common 2, 3 or 4 wire probes with resistance outputs of 400 ohms or less.

PPM-RT2: Accommodates Pt1000 and other common 2, 3 or 4 wire probes with resistance outputs of 4000 ohms or less.

Input Receptacle

Accepts TA4F type RTD connector

RTD Probes Available

Pt-100 probes, 6" or 12" length, with or without handle. DIN Class A accuracy. Includes mating TA4F connector. Consult factory for details and availability.



Rear view of Model PM with 2 pressure sensors installed

STANDARD RANGES

PPM-2 psi (gauge and absolute pressure)	PPM-1 H ₂ O (gauge/ differential pressure)	Other Engineering Units**
5	0.25	psi
10	0.5*	in. H ₂ O
15	1.0*	in. Hg
30	2.0*	ftSW
50	3.0*	Bar
60	5.0*	mBar
100	10*	kPa
150	15*	mPa
200	25*	mmHg
250	50*	cmH ₂ O
300	100*	mmH ₂ O
500	150*	kg/cm ²
600	200*	User Selectable
1000		
1500		
2000		
2500		
3000		
5000		
6000		
7500		
10,000		
vacuum		
*5		
10		
15		
compound		
±5	±0.125*	
±10	±0.25*	
±15	±0.5*	
-15/+30	±1.0*	
-15/+60	±1.5*	
	±2.5*	
	±5.0*	
	±7.5*	
	±12.5*	
	±25*	
	±50*	
	±75*	
	±100*	

**Note: Engineering units identified above are accessible through the unit select feature. However, readout will default to the primary unit of measure on start-up. Sensor modules scaled in primary units other than in. H₂O (PPM-1) or psi (PPM-2) are also available. Consult factory.

* Non-isolated, for clean dry gas only

TO ORDER

Base Display Unit

- 1) Specify Model: PM
- 2) Specify Power Requirements: 110, 220 or 100Vac
- 3) Specify Options: (Backlit, NiCad Battery Pack, Handle, Panel Mounting Brackets)

Sensors

(Base Display Unit can hold a total of 1 or 2 pressure sensors or RTD interface assemblies simultaneously. Sensors and interface assemblies will be installed into the base display unit at the factory.)

- 4) Type (PPM-1 or PPM-2)

- 5) Pressure Range and Unit of Measure (see range chart)

- 6) Pressure Type (see specifications)

- 7) Accuracy (see specifications)

- 8) Specify Options

a) "zero temperature error over compensated range" (HQS-2 only)

b) Optional fitting (see specifications)

c) Clean for Oxygen Service

(PPM-2, 0/10-1/10,000 psi only)

RTD Interface Assembly

- 9) Type (PPM-RT1 or PPM-RT2)

- 10) Probe Type (when required. Consult factory for probe P/N)