

*Precision Solutions
for Pressure,
Level, Vacuum
and Humidity
Measurement*



PMC
ENGINEERING

PMC Engineering LLC

Telephone: (201) 368-1234

SMART (Hart® protocol)



PMC Smart Transmitters accurately measure pressures of heavy slurries, liquids, and vapors. The ceramic capacitance sensor handles overloads of 10 times below 100 PSIG and 4 times from 100 to 300 PSIG, with a 10:1 turndown. The Hart protocol allows easy access to the configuration, test, and detailed set-up of the transmitter. **The remote electronics** version offers a split unit where the transducer is separated from the Hart voltage-to-current converter up to a distance of 60 ft. This PMC product is well suited for high vibration environments and is ideal where limited access is a concern.

- Sensing area is 1 to 1 1/2 " (retro-fits 1:1 nipple)
- Field programmable with Hart communicator
- Continually self tests for automatic output warnings
- Cable or Terminal Head option
- All stainless steel housing available
- Optional local display (LCD)
- Submersible version available
- 3A Sanitary Approved

SPECIFICATIONS

Ranges	4.25"WC to 300 PSIG, 30"Hg Vacuum to 0
Output	4-20mA, Hart® digital signal
Accuracy	±0.25%
Mounting	3A Sanitary Weld-on, Triclover or Flange
Diaphragm	Havar, Hastelloy C, Tantalum, Ceramic
Temperature	-25° to 85° C

ELECTRONIC(4-20mA)



PMC Electronic Transmitters accurately measure pressures, levels, and vacuum ranges in processes where clogging of the diaphragm face is a problem. The small diameter of the transmitter permits installation flush with the inside wall of pipes 2" or larger. This feature avoids the usual pocketing problems encountered with conventional flange-mounted and recessed-diaphragm transmitters. The capacitance sensor handles overloads of up to 10 times nominal range. **The Slimline** version offers a compact design for installation in confined spaces and measures just 1 1/16 "diameter by 4" long. **The remote electronics** version offers a split unit where the transducer is submerged and the electronics are mounted in an accessible location for calibration, with a local display (LCD) option.

- Sensing area is 1 to 1-1/2" (retro-fits 1:1 nipple)
- 4-20mA, 2 wire output, RFI protected
- Cable or Terminal Head option
- All stainless steel housing available
- Optional local display (LCD)
- Submersible version available
- 3A Sanitary Approved

SPECIFICATIONS

Ranges	4.25"WC to 300 PSIG, 30"Hg Vacuum to 0
Output	4-20mA
Accuracy	±0.25%
Mounting	3A Sanitary Weld-on, Triclover or Flange
Diaphragm	Havar, Hastelloy C, Tantalum, Ceramic
Temperature	-25° to 85° C

Flush Mounting • Fully Repairable • Corrosion Resistant

SUBMERSIBLE(4-20mA, Hart® protocol)



PMC Submersible Transmitters are for applications where mounting is a problem. Rugged design allows for total submersion in harsh (corrosive) environments such as fuel and ballast tanks. The housing is a “double-seal” with a vented Teflon-jacketed cable for use in aggressive liquids such as wastewater, seawater, alkaline or acidic chemicals, fuel, and lube oils. **The remote electronics** version offers a split unit where the transducer is submerged and the electronics are mounted in an accessible location for calibration, with a local display (LCD) option.

- Extremely rugged, corrosion-resistant design
- Field programmable with Hart® communicator
- 4-20mA, 2 wire output, RFI protected
- All stainless steel housing
- Optional local display (LCD)
- Remote electronics option

VERSALINE DEPTH & LEVEL



The **PMC VersaLine Series Submersible Depth and Level Transmitters** are specifically designed for use in groundwater, wastewater, seawater, and a variety of other liquids. Typical applications include sewage and pump/lift stations, deep wells, irrigation, rivers and oceanography, food and beverage, pulp and paper, and pharmaceutical. Options include a rugged ceramic diaphragm with flush face design or depth cone. Diameters of 3/8", 3/4", and 1" are available. Select Stainless Steel or Titanium versions to satisfy the most demanding applications. The standard polyurethane vented cable is molded to the transmitter providing the highest integrity waterproof assembly well-proven in thousands of installations worldwide. FEP cable is available as an alternate for harsh environments.

- All Welded 316L SS or Titanium
- 3/4", or 1" Diameter
- 3/8" Diameter compact transmitter available
- Molded Polyurethane or FEP Cable
- Gauge and Absolute Ranges
- Cable lengths up to 5000 feet

SPECIFICATIONS

Ranges	4.25"WC to 710"WC
Output	4-20mA, Hart® digital signal
Accuracy	±0.25%
Mounting	None, Bracket with Remote option
Diaphragm	Havar, Hastelloy C, Tantalum, Ceramic
Temperature	-25° to 85° C

SPECIFICATIONS

Ranges	10"WC to 300 PSI
Output	4-20mA, 2-Wire
Accuracy	From ±0.1%FS
Mounting	Submersible Cable
Diaphragm	Ceramic
Temperature	-10° to 175° F

Flush Mounting • Fully Repairable • Corrosion Resistant

DIFFERENTIAL (4-20mA)



The **PMC Differential Current-to-Current Converter** is accurate and reliable in harsh industrial environments. The DII supplies power to a matched pair of electronic transmitters and computes the differential measurement. The **PMC Differential Transmitter** is used in applications where the pressure drops across a line of filter elements. In a vacuum application, the diaphragm is connected to the vacuum (dusty side), while the 1/8" NPT port is connected to the blower intake (high vacuum side) of the system. The DII is available with a digital read-out. The D/P is well suited for **low pressure** and is strictly used in dry applications.

- Sensing is 1 to 1-1/2" (retro-fits 1:1 nipple)
- Field programmable with Hart communicator
- 4-20mA, 2 wire output, RFI protected
- Cable, Terminal Head, Stainless Steel Housing
- Optional local display with LED Panel
- D/P for DRY applications only

SPECIFICATIONS

MODEL	DII	D/P
Range	0.4mA to 16mA	10 to 80"WC
Output	4-20mA, Hart®	4-20mA, Hart®
Accuracy	±0.10%*	±0.25%
Diaphragm	HA, HC, TA, Ceramic	Ceramic
Temperature	-25° to 85° C	-25° to 85° C

REMOTE DISPLAY PANELS

(Gauge & Meter)



PMC Panel Systems display level and pressure readings in an accessible location where processes can be monitored and adjusted. These panels withstand continuous vibration and may be located up to 100 feet away from the process at any desired elevation. The pneumatic **Gauge Panel System** is equipped with 4" panel gauges, 1:1 pneumatic transmitters, and nameplates. The **Meter Panel System** is equipped with LED meters, electronic (4-20mA) transmitters, power supply, and nameplates. PMC panels are made from 0.040" 304 stainless steel with a brushed finish. The back is open with a 1/2" wide rim. Corners are heli-arc welded, radiused and polished.

Sensing area is 1 to 1-1/2" (retro-fits 1:1 nipple)

1:1 or 4-20mA, 2 wire output, RFI protected

Cable or Terminal Head option

Configured and tested at factory

Non-standard nameplates available

Stainless Steel Tags available

P/I transmitters can be mounted to gauges

Available with slimline electronics

3A Sanitary Approved

SPECIFICATIONS

Ranges	0-15, 30, 60 and 100 PSIG (KPA available w/gauges)
Panel Sizes	2, 3, 4, 6, 8, 9 and 10 Gauge & Meter
Output	1:1, 4-20mA
Accuracy	±0.25%
Mounting	3A Sanitary Weld-on, Triclover or Flange
Diaphragm	Havar, Hastelloy C, Tantalum, Ceramic
Temperature	-25° to 85° C

Flush Mounting • Fully Repairable • Corrosion Resistant

PNEUMATIC (1:1)



PMC Miniature Pressure and Level Transmitters accurately measure pressure and levels in process industries where plugging of gauges and seals is a problem. The small diameter of the transmitter permits installation flush with the inside wall of pipes 2" and larger. This feature avoids the usual pocketing problems encountered with conventional flange-mounted transmitters. This PMC product is well suited for high vibration environments and is ideal where limited access is a concern.

- Sensing area is 1 to 1-1/2" in diameter
- O-Ring seal
- Linear 1:1 output
- 316L stainless steel on all wetted parts
- Direct mounting with pressure or remote gauges
- Change signal to 3-15 PSIG with PT-AR*
- Change signal to 4-20mA with P/I*
- Extremely reliable in very wet locations
- 3A Sanitary Approved

SPECIFICATIONS

Ranges: Pressure Level	0-10, 15, 30, 60, 100 & 150 PSIG 0-10, 25, 50, 100, 300 & 500"WC
Output	1:1, 3-15 PSIG*, 4-20mA*
Accuracy	±0.1 PSIG
Mounting	Weld-on, 3A Sanitary, Triclover or Flange
Diaphragm	Havar, Hastelloy C, Tantalum
Temperature	-25° to 85° C

SEAL GAUGES AND SWITCHES



PMC Seal Gauges accurately measure pressure in industries where viscous materials are processed. The PMC design permits the diaphragm to be installed flush with the inside wall of pipes 3" or larger. This feature avoids the pocketing problems usually encountered with conventional seal gauge systems. The easy-to-read all-stainless steel gauge is equipped for external damping to promote longevity. Gauges can be removed and exchanged or reinstalled without loss of seal oil. The **Seal Switch** is Nema 4 with adjustable ranges. Each gauge and switch is equipped with a proven PMC transmitter and can be bottom or back connected for ease of visibility.

- Sensing area is 1-1/2" (retro-fits LT nipple)
- Face design protects diaphragm from abrasion
- 316L stainless steel on all wetted parts
- Built in gauge damper
- Available in 2-1/2" Gauge w/United Electric Switch
- 3A Sanitary Approved



SPECIFICATIONS

Ranges	0-15, 30 60, 100 & 200 PSIG
Gauge Type	4" and 2-1/2" diameter oil filled
Accuracy	±0.1 PSIG
Mounting	Weld-on, 3A Sanitary, (Back or Bottom)
Diaphragm	Havar, Hastelloy C, Tantalum
Temperature	-25° to 85° C

Flush Mounting • Fully Repairable • Corrosion Resistant



**150# Flange
Extended Diaphragm - Threaded Nipples/Reducers**



**Field Test Panel
Welding Mandrel - Field Extractor - Flowmeter**

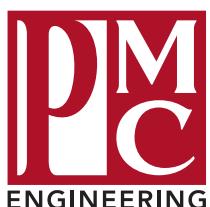
PMC provides industry solutions for the precise and reliable measurement of pressure, level, and vacuum in processes. In 1963, the original flush-mounted transmitter was designed for processes specific to the Pulp and Paper industry. Since then, PMC's patented flush-mounted transmitters have become the standard for **accuracy** and **dependability** in industries such as pulp and paper, food and beverage, petrochemical, pharmaceutical, and wastewater management. PMC offers a full line of pneumatic, 4-20mA, Hart® protocol, and submersible instrumentation with accessories that are built to last. **Rugged** and **reliable**, PMC products accurately measure corrosive, viscous, and clogging fluids in industrial applications around the world.

The PMC corporate commitment to customer satisfaction is reflected in every aspect of product development, manufacturing, and customer service. Transmitters are produced in a modern facility that uses high-tech equipment designed and built in-house. **Quality** is assured by exhaustive, uncompromising attention to manufacturing details, and calibration procedures are performed by skilled technicians.

WORLDWIDE REPRESENTATIVES



Precision pressure transmitters and transducers,
Voltage, current loop and digital interface
Ranges to 15,000 psi, 0.1% total accuracy
www.sts-sensors.com



PMC Engineering LLC
11 Old Sugar Hollow Road
Danbury, CT 06810 U.S.A.
Tel: 203-792-8686
Fax: 203-743-2051
Email: sales@pmc1.com
www.pmc1.com

For more detailed information, contact your local PMC representative or PMC direct.