INDUSTRIAL TRANSMITTER
LONG-TERM RELIABILITY
SMART OR ANALOG OUTPUT

PX2088S Series
4 to 20 mA Output/SMART
0-1 to 0-4000 psi
0-0.07 to 0-275 bar

All Ranges
$1255

MADE IN USA | NIST | FM APPROVED | CE

- **HART®-Protocol Ready**
- **20:1 Turndown**
- **External Zero and Span**
- **0.20% Accuracy**
- **Security Jumpers**
- **Polysilicon Sensor Ensures High Stability and Reliability**
- **Dual-Compartment Housing (Watertight Electronics Compartment)**
- **Individually Characterized and Digitally Compensated**
- **RFI Protection Selected Options**
- **Stainless Steel or Hastelloy® Wetted Parts**
- **Silicon or Inert Oil Fill**
- **LCD Meter Option**
- **Integral Manifolds, Preassembled and Leak Tested**

PX2088S-30GI analog transducer, $1255, shown smaller than actual size.

OMEGA's PX2088S Series smart pressure transmitters maintain a specification conformance of at least 3σ. The reliable performance of these rugged transmitters, when coupled with the broad selection of options, makes these transducers an exceptional value for tough process applications.The PX2088S is designed to operate safely in the event of damage or failure to the sensor diaphragm. The electronics compartment is isolated from the process by 2 seals.

A third seal isolates the field terminals and conduit entries. This design ensures against housing pressurization and process contamination.

The electronics incorporates an ASIC module that accepts the digital signal from the sensor, along with the correction coefficients, then corrects and linearizes the signal. This is then converted to an analog signal for retransmission. The output section also handles the HART® communications.

AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*

MODEL NO.	PRICE	MIN SPAN	MAX SPAN	COMPATIBLE METERS*
SMART 4 to 20 mA Output				
PX2088S-30GI	**$1255**	0 to 1.5 psi	0 to 30 psi	DP41-E, DP25B-E, DP24-E
PX2088S-150GI	**1255**	0 to 7.5	0 to 150	DP41-E, DP25B-E, DP24-E
PX2088S-600GI	**1255**	0 to 30	0 to 600	DP41-E, DP25B-E, DP24-E
PX2088S-4KGI	**1255**	0 to 200	0 to 4000	DP41-E, DP25B-E, DP24-E

Comes with complete operator's manual.

** See section D for compatible meters.*
See Specifications for fitting material and fill fluid options.
*To order absolute pressure ranges, change the **"G"** in the model number to an **"A"**, and add **$215** to price. To order LCD meter scaled 0 to 100%, add suffix **"-M5"**, and add **$250** to price.*

Ordering Example: PX2088S-150AI,** smart transducer, 150 psi absolute pressure range, with 4 to 20 mA output, $1255 + 215 = **$1470.

Recommended Reference Book:
Environmental Remote Sensing,
ES-1019, $205.
Visit **omega.com/bobi**
for Additional Books

SMART OR ANALOG INDUSTRIAL TRANSMITTER

SMART FUNCTIONALITY

The PX2088S smart transducer HART® protocol allows easy access to configuration, test, and setup capabilities.

The PX2088S can be configured using a HART® communicator or another HART®-based communications device. Configuration consists of two steps. First, the transmitter operational parameters are set including:

- Zero and span
- Damping
- Engineering units.

Second, data can be entered into the transmitter to allow identification and physical description of the transmitter. These data include:

- Tag: 8 alphanumerics
- Descriptor: 16 characters
- Message: 32 characters
- Date
- Integral meter installation
- Remote seal information

In addition to the configurable parameters, the PX2088 software contains information that is not user-changeable. Non-configurable information includes:

- Transmitter type
- Sensor limits
- Minimum span
- Fill fluid
- Isolator material
- Module serial number
- Transmitter software revision level

SPECIFICATIONS

Excitation: 10.5 to 36 Vdc unregulated, reverse polarity protected

Supply Effect: <0.01% span/V

Zero Elevation and Suppression: Zero can be suppressed between atmosphere (or 0 psia for absolute ranges) and the upper range limit (URL), provided the span is ≥ the minimum span and the URL does not exceed the unit's URL. No vacuum calibrations are allowed on the gage pressure models.

Overpressure Limits:
8 and 30 psi Ranges: 120 psi
>30 psi Ranges: 2x URL

Process Temperature Limits:
Silicon Fill: -40 to 121°C (-40 to 250°F)
Inert Fill: -30 to 121°C (-20 to 250°F)

Ambient Temperature Limits:
Standard: -40 to 85°C (-40 to 185°F)
LCD Meter: -20 to 80°C (-4 to 175°F)

Volumetric Displacement: <0.00042 cm^3

Accuracy: Includes linearity, hysteresis and repeatability
Smart: ±0.20% of calibrated span
Analog: ±0.25% of calibrated span

Ambient Temperature Effect:
Smart:
±(0.003% URL + 0.003% span)/°F
Analog (Ranges >8 psi): -40 to 0°F ±(0.007% URL + 0.008% span)/°F; -0 to 140°F ±(0.005% URL + 0.005% span)/°F; 140 to 185°F ±(0.007% URL + 0.008% span)/°F

Stability:
Smart: ±0.10% URL for 12 months
Analog: ±0.25% URL for 12 months

Vibration: <±1% URL 4 mm pk/pk 5 to 15 Hz and constant acceleration of 2 g (15 to 150 Hz) and 1 g (150 to 2000 Hz)

Process Connection: ½ to 14 FNPT

Wetted Parts: 316 SS (Hastelloy® optional)

Electronic Housing: Sealed to NEMA 4X (IP66), low-copper aluminum with polyurethane paint; cover O-ring is Buna-N

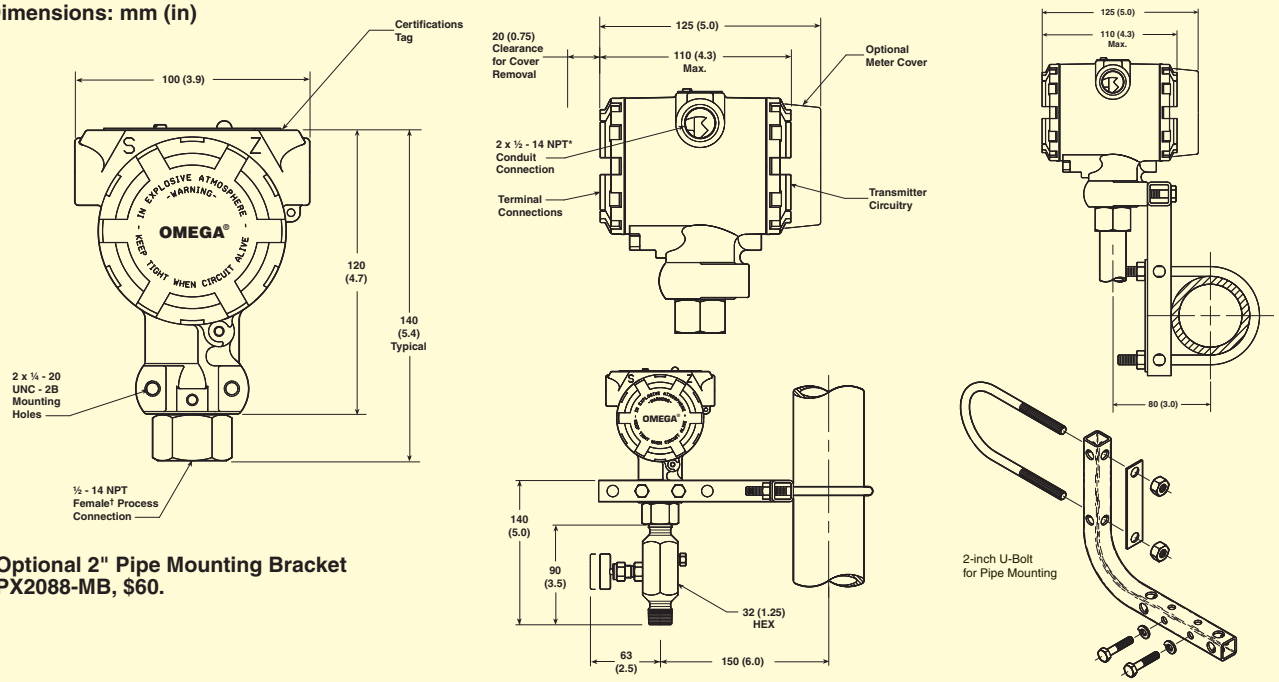
Electrical Connections: ½ to 14 NPT conduit

Fill Fluid: Silicon oil, standard; inert oil, optional

Weight:
Smart: 1.11 kg (2.44 lb)
Analog: 0.86 kg (1.9 lb)

Fitting Material/Fill Options: (add suffix)
SS/Silicon Oil: Standard
Hastelloy/Silicon Oil: **"-33"** add **$250**

Dimensions: mm (in)



Optional 2" Pipe Mounting Bracket PX2088-MB, $60.

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