

# **Precision Pressure Transducer Ruggedized** (PPTR) - Submersible

Honeywell's submersible PPTR transducer is a rugged, smart pressure transducer for use in the harsh environment of liquid measurements. It combines proven silicon sensor technology with microprocessor-based signal conditioning to provide an extremely smart pressure transducer. The PPTR submersible utilizes an integral SEA CON® electrical connector. The transducer is designed with an environmentally sealed, stainless steel construction that can operate in severe environments. The PPTR has many software features that support a wide range of applications.

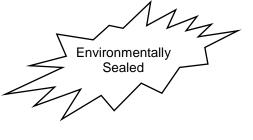
#### **APPLICATIONS:**

- Ocean Depth
- Remotely operated underwater vehicle (ROV)
- Autonomously operated underwater vehicles
- **Data Loggers**
- Water Level



±0.07% FS Total Error Band from -4 to 60°C

RS-232 or RS-485 Digital



## FEATURES AND BENEFITS

ISO-9001 ISO-14001

- High Accuracy ±0.07% FS Total Error Band from -4 to 60°C
- Smart, Digital Sensing and Control
- Versatile and Configurable

- Simplifies System Design No additional signal compensation needed to gain the benefits of a very accurate sensor.
- **Easy Interface** Connects to PC via communication port.
- Digital Outputs. RS-232 or RS-485 Isolation diaphragm handles most media - harsh gases or liquids. Rugged Design - Operates in severe environments. Optimizes Output - User-configurable pressure units, sampling, update rate.
  - Flags Problems Internal diagnostics set flags, provide status.
- **User Selectable Software Features**
- Baud Rate, Parity Setting, Continuous Broadcast, ASCII or Binary Output, Sensor Temperature Output (°C or °F)

## **PPTR Submersible**

## **SPECIFICATIONS**

#### Performance Specifications (1)

Total Band Error: (from -4 to 60°C)

Digital: ±0.07% FS Max. (2)

Temperature: ±1°C (at sensing element)

Temperature Range:

Operating -4 to 60°C (-24 to 140°F) Storage: -40 to 90°C (-40 to 194°F) **Sample Rate**<sup>(5)</sup>: 8.33ms to 51.2 min

Resolution:

Digital: Up to 0.001% FS Response Delay:

(1000/update rate) +1ms, minimum 17ms

## Mechanical Specification

Pressure Ranges and Type:

See Ordering Information

**Pressure Units**(5): atm, bar, cmwc, ftwc, hPa, inHg, inwc, kg/cm2, KPa, mBar, mmHg, MPa, mwc, psi, user, Icom, pfs

Media Compatibility: Suitable for media compatible

with 316 stainless steel (6)

Weight: 15 oz. (424 g) with Delrin® protective cap

#### **Electrical Specifications**

#### Output:

RS-232 Digital RS-485 Digital

## **Power Requirements:**

Supply Voltage: 6 to 30 VDC Operating Current: 19-27mA **Baud Rate**<sup>(5)</sup>: 1200, 2400, 4800, 9600,

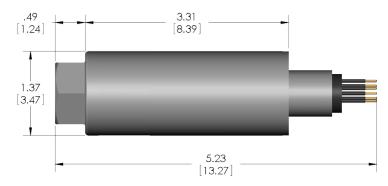
14400, 19200, 28800

## Environmental Features (3)(4

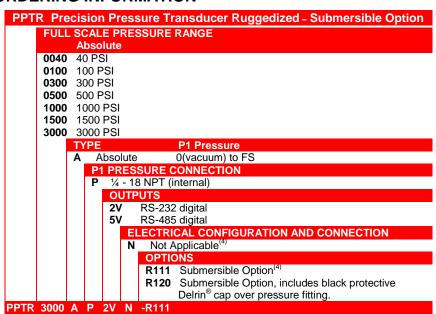
Overpressure: 3x FS, maximum 6000psi Burst Pressure: 3x FS, maximum 8500psi

(1) Total Error Band is the sum of worst case linearity, repeatability, hysteresis, thermal effects and calibration errors from -4 to 60°C. Calibration is traceable to NIST. (2) Consult factory for other pressure range or accuracy (3) Exposure to overpressure will not permanently affect calibration or accuracy of unit. Exceeding burst pressure may result in media escape. (4) SEA CON® connector MC-BH-6-M Micro WET-CON. Mates with SEA CON® Micro WET-CON MC-IL-6-F connector with MC-DLS-F locking sleeve. (5) User configurable. (6) For compatibility with various liquids, please note the materials used for manufacturing the connector and protective cap consist of Hypalon, SS316L and Delrin 150.

## CASE OUTLINE: Dimensions: inches [cm]

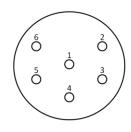


#### ORDERING INFORMATION



## SUBMERSIBLE CONNECTOR PINOUT DIAGRAM

## Signal Name RS-232 (TD) / RS-485 (B) RS-232 (RD) / RS-485 (A) Case Ground Common Ground (GD) DC Power In Unused - Do Not Connect



## Find out more

For more information on Honeywell's Precision Pressure Transducers visit us online at www.honeywell.com/pressuresensing or contact us at 800-323-8295 or 763-954-2474. Customer Service Email: ps.customer.support@honeywell.com.

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