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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

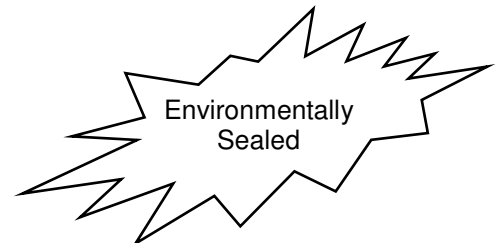
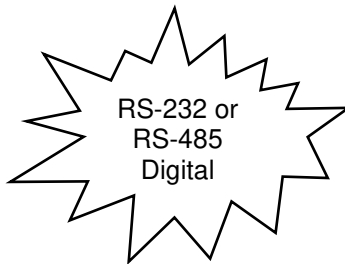
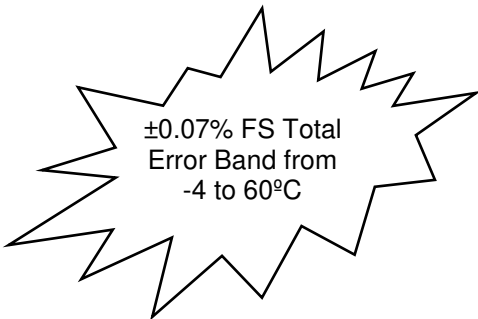


## Precision Pressure Transducer Ruggedized (PPTR) - Submersible

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



### FEATURES AND BENEFITS

ISO-9001  
ISO-14001

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▶ <b>High Accuracy</b><br/>±0.07% FS Total Error Band from -4 to 60°C</li> <li>▶ <b>Smart, Digital Sensing and Control</b></li> <li>▶ <b>Versatile and Configurable</b></li> <li>▶ <b>User Selectable Software Features</b></li> </ul> | <ul style="list-style-type: none"> <li>▶ <b>Simplifies System Design</b> - No additional signal compensation needed to gain the benefits of a very accurate sensor.</li> <li>▶ <b>Easy Interface</b> - Connects to PC via communication port.</li> <li>▶ <b>Digital Outputs.</b> - RS-232 or RS-485<br/><b>Isolation diaphragm handles most media</b> - harsh gases or liquids.<br/><b>Rugged Design</b> - Operates in severe environments.<br/><b>Optimizes Output</b> - User-configurable pressure units, sampling, update rate.<br/><b>Flags Problems</b> - Internal diagnostics set flags, provide status.</li> <li>▶ Baud Rate, Parity Setting, Continuous Broadcast, ASCII or Binary Output, Sensor Temperature Output (°C or °F)</li> </ul> |
|---|--|

# PPTR Submersible

## SPECIFICATIONS

### Performance Specifications<sup>(1)</sup>

**Total Band Error:** (from -4 to 60°C)

Digital: ±0.07% FS Max.<sup>(2)</sup>

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 Specifications

#### Pressure Ranges and Type:

See Ordering Information

**Pressure Units<sup>(5)</sup>:** atm, bar, cmwc, ftwc, hPa, inHg, inwc, kg/cm<sup>2</sup>, KPa, mBar, mmHg, MPa, mwc, psi, user, lcom, pfs

**Media Compatibility:** Suitable for media compatible with 316 stainless steel<sup>(6)</sup>

**Weight:** 15 oz. (424 g) with Delrin<sup>®</sup> 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>(6)</sup>:** 1200, 2400, 4800, 9600,

14400, 19200, 28800

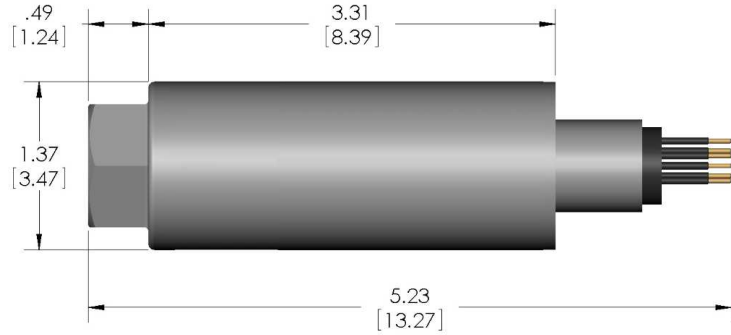
### Environmental Features<sup>(3)(4)</sup>

**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 options. (3) Exposure to overpressure will not permanently affect calibration or accuracy of unit. Exceeding burst pressure may result in media escape. (4) SEA CON<sup>®</sup> connector MC-BH-6-M Micro WET-CON. Mates with SEA CON<sup>®</sup> 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

### PPTR Precision Pressure Transducer Ruggedized - Submersible Option

#### FULL SCALE PRESSURE RANGE

##### Absolute

|             |          |
|-------------|----------|
| <b>0040</b> | 40 PSI   |
| <b>0100</b> | 100 PSI  |
| <b>0300</b> | 300 PSI  |
| <b>0500</b> | 500 PSI  |
| <b>1000</b> | 1000 PSI |
| <b>1500</b> | 1500 PSI |
| <b>3000</b> | 3000 PSI |

#### TYPE

#### P1 Pressure

**A** Absolute 0(vacuum) to FS

#### P1 PRESSURE CONNECTION

**P** ¼ - 18 NPT (internal)

#### OUTPUTS

**2V** RS-232 digital

**5V** RS-485 digital

#### ELECTRICAL CONFIGURATION AND CONNECTION

**N** Not Applicable<sup>(4)</sup>

#### OPTIONS

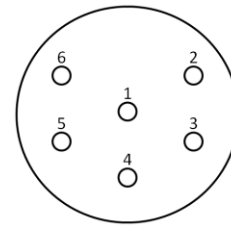
**R111** Submersible Option<sup>(4)</sup>

**R120** Submersible Option, includes black protective Delrin<sup>®</sup> cap over pressure fitting.

**PPTR 3000 A P 2V N -R111**

## SUBMERSIBLE CONNECTOR PINOUT DIAGRAM

|   | Signal Name              |
|---|--------------------------|
| 1 | RS-232 (TD) / RS-485 (B) |
| 2 | RS-232 (RD) / RS-485 (A) |
| 3 | Case Ground              |
| 4 | Common Ground (GD)       |
| 5 | DC Power In              |
| 6 | Unused - Do Not Connect  |



## Find out more

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

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Honeywell Aerospace  
Honeywell International Inc.  
12001 Highway 55  
Plymouth, MN 55441  
[www.honeywell.com](http://www.honeywell.com)

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