



## PPT88 Series



- 10Xs Faster (200Hz Update)
- Store up to 200,000 Data points
- -20-85°C (125C option) Operating Temperature
- Total Error Band 1%
- 50-15,000 psi pressure ranges
- Absolute, Gauge, Vacuum
- Media – Liquid, Air, & Gas
- Download data to PC using PC Terminal.
- IP65 (& IP67)

### DESCRIPTION

The PPT88 is the worlds smallest pressure sensor data logger. This pressure data logger is less than 1” in diameter and only 2.7” tall. The sensor is capable of storing of up to 200,000 (pressure, temperature, & time stamp) measurements directly onto the sensor. This battery powered (3V DC supply option available) miniaturized pressure sensor was designed to supply an economical solution for industrial, consumer, and commercial applications where size, cost, and time are important.

After logging data for minutes, hours, days or months. Simply download the data onto any PC using Hyper-terminal. The sensor can store data at rates up to 200 times a second (200Hz). Depending on the upate rate, the battery will last up 2-weeks (1 measurement/10 sec). Please contact us for Custom design availability.

Store the data directly on the sensor for analysis later. The unit provides a time-stamp, temperature, and pressure data.

### APPLICATIONS

- Gas Pipes
- Industrial Automation
- Agricultural
- Pumps
- Compressors
- Pneumatics

## Maximum Environmental Ratings

Operating Temperature ..... -20°C to 85°C  
 Storage Temperature Range .....-40°C to 85°C

Proof pressure ..... 2x full scale pressure  
 Burst pressure ..... 3x full scale pressure (Max 12kPSI)

## Liquid Level – Trucks, Gas/Water Tanks

The PPT88 is a wireless pressure sensor used in a variety of liquid level applications, such as Water Trucks, Liquid Tanks, Oil tanks, and Spas. It can measure down to 1” of H2O



## Environmental Monitoring



The PPT88 is a wireless pressure sensor that can measure down to pressures of 3PSI, so it is ideal for most air filter applications. For troubleshooting, the PPT88 offers temporary remote Pressure and Temperature measurement of the system. The battery powered solution can last up to 12-months of continuous (1 measurement/10 seconds) use.

## HVAC – High & Low Side of A/C

The PPT88 is a wireless pressure sensor that can measure up to pressures of 15,000PSI. It is accurate and robust enough for HVAC applications; if you need temporary remote Pressure and Temperature measurement of the system this sensor is your solution.



## Pumps – Water, Hydraulic, etc.



The PPT88 is a wireless pressure sensor that can measure up to pressures of 15,000PSI, so it is ideal for Hydraulic Pump applications. For monitoring, the PPT88 offers temporary remote Pressure measurement of the system. The battery powered solution can last up to 24-months of continuous (1 measurement/30 seconds) use.

## PPT88 Operational Characteristics

$V_+ = 5V$ ,  $V_- = 0V$ , Temperature = 25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage (note 1)	$V_{DD}$	2.2	3	3.5	V
Supply Current	$I_{DD}$	5	50	750	uA
Wireless Digital Output (BLE)	BLE				
Linearity (Note 2)		-0.25		0.25	%FS
Temperature Error (Null and Span) (Note 3)		-1		+1	C
Response Time	$t_R$		5	60,000	ms
Total Error Band (Note 4)		-1		1	%FS
Compensated Temperature Range	C	0		50	C
Operating Temperature Range	C	-20		85	C

Notes:

1) Battery & Rechargeable Version - 3V battery operation 2) Defined as best straight line 3) Measured from 0°C to 50°C 4) Measured over compensated temperature range -10-50C

## Application Information

### Package

The two piece body design is made of SS316 and Acetal, which allows for easy low-cost manufacturability and corrosion resistance. Vibration proof design for use in industrial applications. Brass, Inconel, or Titanium options are available for custom designs

### Stability

The silicon MEMS pressure sensor element is mounted to a SS base and sealed into the SS316 housing. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Additional stability is gained from factory stabilization of all sensors.

### Pressure port

1/4" -18NPT and 1/8"-18NPT threads are standard SS fittings. Other port fittings such as 7/16-20UNF, and 1/4" BSP are available for OEM customers.

### Media

The pressure port is tolerant to most media including but not limited to oil, air, gas, and non-corrosive media. Sensor will only work on a temporary basis in any non-air application. Sensor will need to have a period of time to dehydrate.

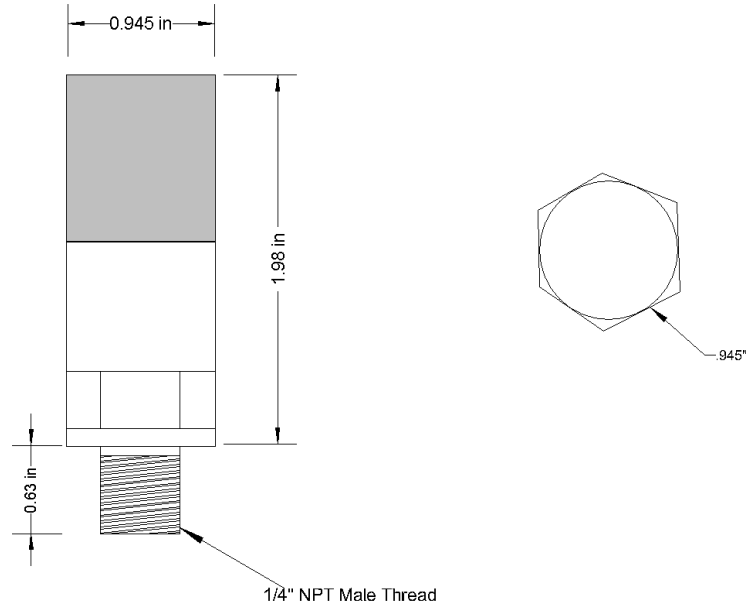
### Wetted parts

When checking media capability, the wetted surface is composed of only 316SS.

### Pressure ranges

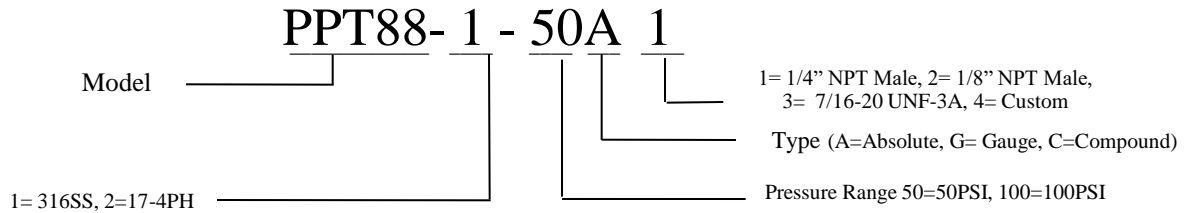
Standard pressure ranges are 50, 100, 200, 300, 1k, 3k, 5k, and 10k psi in absolute and gage. Custom pressure ranges are available for OEM customers.

## Mechanical Dimensions (inches)



**Pic. 1 - Battery Option**

## Part Number Configuration



## Standard Part Numbers

Model	Pressure Range PSI	Type	Max Over Pressure
PPT88-0-50A1	50	Absolute	150
PPT88-0-100A1	100	Absolute	200
PPT88-0-300A1	300	Absolute	450

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