

# SPT Series Wireless Pressure Sensors

The SPT series wireless pressure sensors are industrial-grade sensors designed for pressure and temperature monitoring in pipelines or containers. The sensors feature low noise, interference resistance, high accuracy, ultra-low power consumption, and robust durability, making them suitable for long-term use in various harsh industrial environments.

The sensor utilizes advanced glass micro-fusion technology and is equipped with an integrated stainless steel pressure cavity, ensuring complete leak prevention. It offers a minimum overload pressure range of 2 times to 20kpsi of the rated pressure, and a burst pressure range of 3 times to 20kpsi of the rated pressure. The sensor integrates a high-precision 24-bit digital sampling circuit, enabling accurate and reliable pressure measurements.

SPT series pressure and temperature sensors are easy to install and offer various standard interface options for installation.

The sensor data is transmitted through a wireless sensor network to a remote monitoring platform. Users can remotely monitor the pressure and temperature of the equipment, receive real-time alerts, and continuously track the entire pressure variation process. This ensures the safe operation of the equipment, prevents unplanned downtime, and reduces maintenance time and costs.

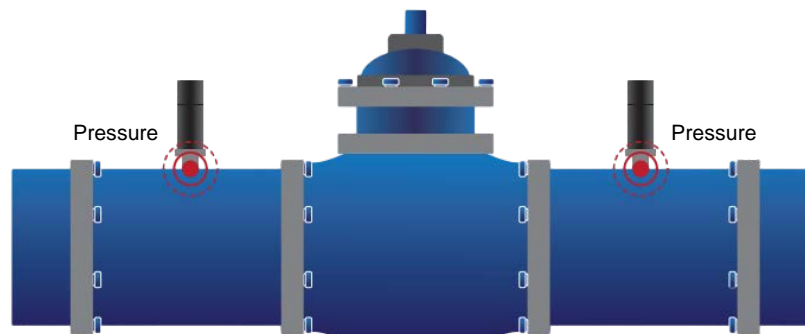


## Features and Advantages

- Accurate ⇒ Low noise, high precision, 24-bit sampling.
- Easy-to-install ⇒ Cable-less, compact, lightweight, with multiple standard interface options.
- Wireless ⇒ 2.4GHz wireless sensor network; capable of transmitting data reliably.
- Low-powered ⇒ Built-in battery with 5 years of life for normal usage.
- Ruggedized ⇒ High overload and burst pressure; waterproof, dustproof, shockproof, corrosion-resistant, and intrinsically safe; suitable for harsh industrial environment.
- Flexible ⇒ The sampling and communication periods can be configured according to specific requirements.
- Accessible ⇒ Remotely accessible anytime, anywhere; automatic alarm; maintenance free.
- Convenient ⇒ Bluetooth compatible and connected via mobile APP.

## APPLICATIONS

- Hydraulic Pressure
- Gas Pressure
- Pumps and Compressors
- Oil and Gas Pipelines
- Tanks and Containers
- Industrial Process Control



## Specifications

Product Model	SPT200
Pressure Precision (Non-linearity/Repeatability)	±0.25% F.S. (Full Scale)
Overall Precision	±2% F.S.
Compensated Temperature Range	0~70°C
Pressure Cycles	1 x 10 <sup>6</sup>
Overload Pressure	2 times rated pressure up to 20kpsi
Burst Pressure	3 times rated pressure up to 20kpsi
Long-term Stability	±0.25% F.S./year
Temperature Measurement Range	-40~85°C
Temperature Precision	±1°C
Shock Resistance	50g
Vibration Resistance	±20g
Data Acquisition Period	1/2/5/10/15/20/30/60/120/240/360/480/720/1440 minutes
Communication	2.4GHz Wireless Sensor Network (Bluetooth 5.0), line-of-sight range 300m
Battery	3300mAh Li/SOCL2; replaceable
Dimensions	41mm x 95mm (D x H)
Weight	250g
Operating Temperature	-40~85°C
Operating Humidity	10%~90% RH
Enclosure	17-4PH stainless steel and polycarbonate
Explosion Protection	EX ia IIC T4 Ga
Ingress Protection	IP67
Mounting	Threaded

### Range Codes

Code	Bar	MPa	Psi
0M7	7	0.7	100
1M0	10	1.0	150
1M7	17	1.7	250
3M5	35	3.5	500
07M	70	7.0	1000
10M	100	10	1500
15M	150	15	2250
20M	200	20	3000
35M	350	35	5000
50M	500	50	7500
70M	700	70	10000
100M	1000	100	15000

### Interface Codes

Code	Interface Specification	Dimension A
1	G1/4 JIS B2351	0.472 [11.94]
2	M20 x 1.5 mm ISO 6149-2	0.661 [16.8]
3	1/4-18 NPT	0.600 [15.24]
4	7/16-20UNF FEMALE SAE J514 STRAIGHT THREAD WITH INTEGRAL VALVE DEPRESSOR	0.687 [17.5]
5	M14 x 1.5 mm ISO 6149-2	0.433 [11.0]
6	1/8-27 NPT	0.390 [9.91]
7	M12 x 1.5 mm ISO 6149-2	0.433 [11.0]
8	M10 x 1.0 mm ISO 6149-2	0.374 [9.5]
9	G1/4 DIN 3852 FORM E GASKET DIN3869-14 NBR	0.472 [11.94]

