

# TIRE MOUNTED SENSOR

## INTELLIGENT TIRE SOLUTION

Tires are the single point of contact between the vehicle and the road, making tire insights extremely important to the future of transportation. Sensata’s intelligent Tire Mounted Sensor is designed to be equipped with Bluetooth® low energy wireless technology. It attaches to the inner liner of the tire and is developed as the next step in the evolution of tire sensing, delivering insights beyond just pressure and temperature.



### Features

- With Sensor mounted directly to the tire, Tire ID programming enables vehicle to adjust performance and handling to match the installed tire
- Option for traditional 433MHz or for new Bluetooth® enabled sensors
- Sensors with Bluetooth® wireless technology enable Over the Air Updates (OTA) to add additional features and capabilities after vehicle is already in the field, as well as making remote tire information traceability for warranty purposes more effective

### Benefits

- Measures Pressure, Temperature, and Acceleration
- Fits in VDA Standard Rubber Tire Mount
- Designed to last the life of the tire
- Capable of bi-directional wireless communication
- Programmable with Tire Details (ID) or new Advanced Features
- Added processing capability to enable signal analysis on the edge
- Optimized design enables battery to last the life of a tire
- Options available compatible with either 433 MHz or Bluetooth® v5.1-v5.3

## SPECIFICATIONS

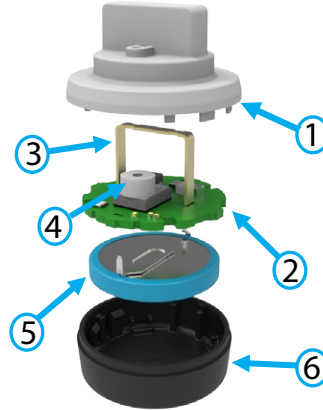
<b>Pressure Range</b>	0-800kPA*
<b>Temperature Range</b>	-40°C to +105°C
<b>Excursions</b>	+120°C
<b>Accelerometer (z-axis)</b>	300 G
<b>Accelerometer (x-axis)</b>	Contact Sensata for more details
<b>Excursions</b>	300kph / 186mph
<b>Mass</b>	7.9g
<b>Battery Life*</b> <b>*use case dependent</b>	6 years or 120,000 miles
<b>RF Communication</b>	Options available compatible with either 433 MHz or Bluetooth® v5.1-v5.3
<b>Compliance</b>	Meets all VDA tire sensor requirements

\* Contact Sensata to discuss potential needs for expanded capability



## OPERATING ENVIRONMENT COMPLIANT

- High Speed ECE 30 Regulation
- Low speed endurance (with and without humidity)
- High Speed Ramp Testing
- Tire overload & Cleat
- Mechanical vibration
- Thermal cycle / shock and humidity
- High / Low Temperature Endurance
- Cyclic thermal frost humidity

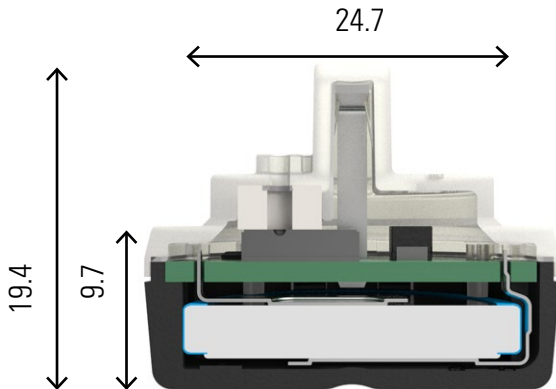


No.	Component
1	Laser Welded Lid
2	PCB
3	Antenna
4	Sealing Grommet
5	Battery
6	Laser Welded Base



## DIMENSIONS

Dimensions in mm



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