

BLUETOOTH 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 Bluetooth enabled Tire Mounted sensor attaches to the inner liner of the tire and has been developed as the next step in the evolution of tire sensing, delivering insights beyond just pressure and temperature.



Features

- With the Sensor mounted directly to the tire, Tire ID programming enables the vehicle to adjust performance and handling to match the installed tire
- Bluetooth Low Energy (BLE) enables Over the Air Updates (OTA) to add additional features and capabilities after the vehicle is already in the field
- Can leverage existing BLE infrastructure being introduced to support cell phones as smart keys, removing UHF receivers and reducing total system cost
- Bluetooth Low Energy Tire-Mounted Sensor with Tire ID makes remote tire warranty tracking and notification more robust and efficient

Benefits

- Measures Pressure, Temperature, and Acceleration
- Fits in VDA Standard Rubber Tire Mount
- Designed to last the life of the tire
- Compatible with BLE v5.2
- 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

SPECIFICATIONS

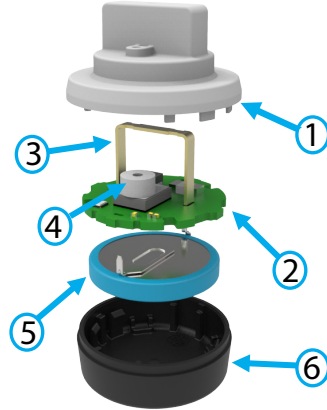
Pressure Range	0-800kPA*
Temperature Range	-40°C to +105°C
Excursions	+120°C
Accelerometer (z-axis)	300 G
Accelerometer (x-axis)	Contact Sensata for more details
Excursions	300kph / 186mph
Mass	7.9g
Battery Life* *use case dependent	6 years or 120,000 miles
RF Communication	Compatible with BLE v5.2
Compliance	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

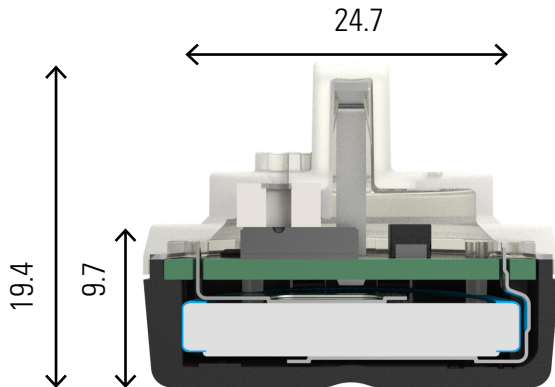


No.	Component
1	Laser Welded Lid
2	PCB
3	Antenna
4	Sealing Grommet
5	Battery
6	Laser Welded Base



DIMENSIONS

Dimensions in mm



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