



**Sensata**  
Technologies

## *AG5PF4 TPM sensor user manual*

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## 1. Production Introduction

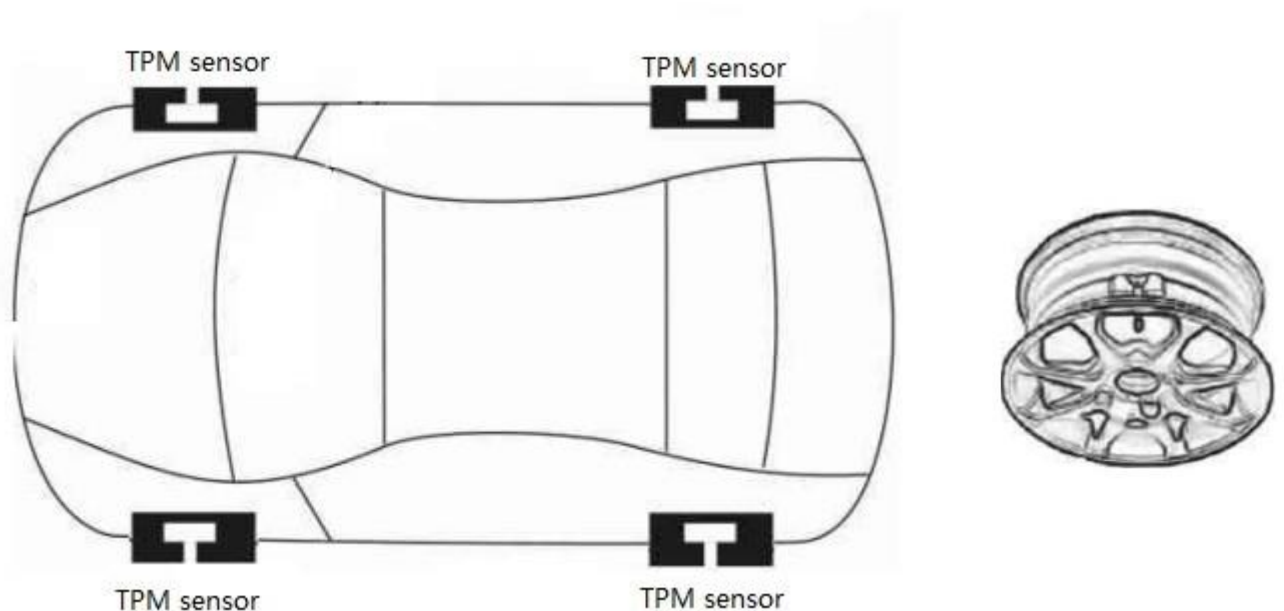
### 1.1 Product Feature

TPMS sensor is used to monitor tyre pressure and temperature data of each tyre. Sensor will transmit RF frames to receiver. Sensor could be activated by LF command or Delta P or motion.

### 1.2 Caution

1. The tyre's temperature and pressure will increase while driving. The vehicle should be stopped for cooling if there's a high temp warning and avoid braking problem or tire blowout
2. Driver should stop the vehicle and get off to check the tyre if there's continue low pressure warning
3. Be aware of tyre blowout when there is low pressure warning
4. The TPM system can effectively monitor tyre pressure and temperature but cannot avoid traffic accident after tyre blowout. Using quality tyre product and correct tyre pressure monitoring is still necessary
5. Be aware of driving safety while checking tyre data on the way of driving

### 1.3 Installation Tips

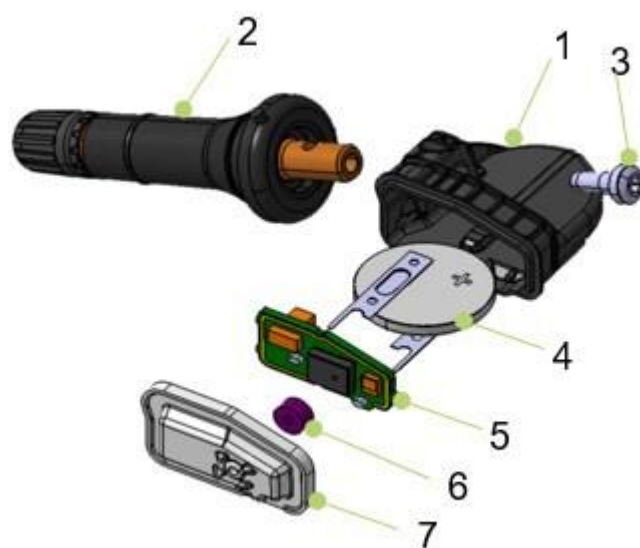


1. The sensor will be in sleep mode to save battery life. After mounter onto rim, and inflate the tyre to recommend pressure data(RCP from Car manufacturer), sensor will exit sleep mode and enter into stationary mode.
2. If sensor detects motion, wheel rotates to the threshold which could active sensor(e.g. 25km/h), then sensor will transmit RF frames cyclically.
3. Due to the air expansion and contraction, the tyre pressure and temperature will normally changing all the time while driving
4. There is normal air leakage in every tyre rim, TPM sensor should have no responsibility to keep the tyre pressure unchanged after long time storage or driving

## 1.4 Electronic characteristics

Parameter/参数	Typical/典型值	Min/最小值	Max/最大值	Unit/单位
Modulation Technique 调制方式	FM (FSK)			
RF Carrier Frequency RF载波频率	433.92	433.87	433.97	MHz
FM High frequency FM高频	CF+40kHz	CF+30	CF+50	KHz
FM Low frequency FM低频	CF-40kHz	CF-50	CF-30	KHz
FM Deviation (peak to peak) FM频偏（峰峰值）	80	60	100	KHz
Operating Temperature 工作温度	(dependent on local ambient conditions)（取决于当地环境条件）	-40	125	°C
Pressure Range 压力范围	N/A	0	6.3	bar
Radiated Field Strength (Ambient Value) 场强（环境温度值）	86	83	89	dBμV/m
Data Rate 波特率	9600	9120	10080	bps
Bit-width Timing(Half period) 位宽（半周期）	52.08	49.6	54.82	μS

## 1.5 Monitoring Feature



NO	Component
1	Enclosure
2	Valve Assembly
3	Screw
4	Battery
5	PCB and antenna
6	Pressure port seal
7	Lid

## 2. FCC Regulatory Compliance Statements

Compliance Statement: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### FCC Radiation Exposure Statement

This equipment complies with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.