

# User Manual

## 1. Sensor Overview

The sensors use a tire pressure monitoring system (TPMS), to form a system with the car's tire pressure receiving unit, you need to install the tire wheels (as shown).



## 2. Instructions for use

In stationary mode, the pressure and acceleration are measured about every 30 second and emission of RF frames occurs only if pressure variation, higher than a threshold, is detected (leakage detection).

When the vehicle starts moving, the Tire Guard transmitter enters the driving mode. Then the wheel unit measures and transmits data every 60 seconds.

If, during any measurement period in driving mode, the pressure leakage is detected (difference compared to the last transmitted pressure value), a alarm signal will occur taking in account the latest pressure value emitted as reference value. If the pressure continues changing, an additional transmission will be sent.

## 3. Technical Description

Carrier frequency: 433.93 MHz

Number of channels: 1

Method of frequency generation: PLL

Type of modulation: ASK or FSK

Rated Output Power: < 10 mW

Antenna: Integrated antenna

Voltage supply: Lithium battery 3V

Voltage supply range: 2.1V up to 3.3V

#### **4. Warning Statement**

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.

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.

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