

# User Manual

## 1. Sensor Overview

The tire pressure sensor consists of the following units:

- Tire guard transmitter type which includes an integrated pressure, temperature and acceleration sensor and a RF transmitter.

In stationary mode, the pressure and acceleration are measured about every 16 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 30 seconds.

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

## 2. Technical Description

Carrier frequency: 315 MHz

Frequency shift: None

Number of channels: 1

Method of frequency generation: PLL

Type of modulation: ASK

Rated Output Power: < 10 mW

Antenna: External (Valve antenna)

Voltage supply: 1 Lithium battery 3V (CR2450)

Voltage supply range : 2.1V up to 3.3V

## 3. Warning 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 interference received, including interference that may cause undesired operation.

### **Note:**

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.