

Document Information

Model	V101M	Product Type	BLE TPMS External Sensor
Document Version	v1.0	Last Updated	2026-02-08

Overview

V101M is a BLE (Bluetooth 4.0+) smartphone TPMS using external wheel sensors. Once installed on the tire valves, the mobile app displays tire pressure and temperature in real time and provides alerts when readings are abnormal.

Scope

This specification applies to the V101M BLE TPMS external sensor. It defines key hardware specifications, wireless capabilities, app compatibility, and packaging information for product evaluation and quality verification.



BLE 4.0+

2.4 GHz wireless to smartphone app; low power BLE



100-1300 kPa

Direct pressure measurement with ± 10 kPa accuracy



Temp: ± 3 °C

Real-time tire temperature monitoring



Long Battery Life

140 mAh, 3-5 years typical; ≤ 2.2 μ A standby



IP67 / 95% RH

Water & dust resistant for daily driving



Smartphone App

iOS & Android; real-time display & alerts

Physical Specifications

Weight: 8 g \pm 1 g (external sensor)

Battery: 140 mAh (3V)

Waterproof: IP67

Operating Temp: -30 °C to +80 °C

Sensor Specifications

Processor	ARM M0	Communication	Bluetooth 4.0 or above (BLE)
Working voltage	3 V	Working current	100 μ A
Standby current	≤ 2.2 μ A	RF frequency	2.4 GHz
TX power	Max 0 dBm	Response time	≤ 5 s
Display	Mobile phone app	Ingress protection	IP67
Operating humidity	95% RH max	Pressure range	100-1300 kPa
Pressure accuracy	± 10 kPa	Temperature accuracy	± 3 °C
Operating temp.	-30 °C to +80 °C	Storage temp.	-30 °C to +85 °C
Battery capacity	140 mAh (external)	Battery life	3-5 years (external)
Sensor weight	8 g \pm 1 g (external)		

Compatibility

- Android and iOS smartphones with Bluetooth 4.0 or above.

Package Contents

- ✓ 2× external TPMS sensors
- ✓ 2× anti-theft locks (locking nuts/screws)
- ✓ 1× wrench (installation/removal tool)
- ✓ 1× card (QR code / pairing reference)
- ✓ 1× retail box