

Audience: This document is intended for distributors, installers, and customer support teams.

Model	V102A	Document Version	v1.0
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1. Product Positioning (for Partners)

V102A is a BLE (Bluetooth Low Energy) direct TPMS internal sensor for monitoring tire pressure and tire temperature using a smartphone app. This document is intended for distributors, installers, and customer support teams.

2. Product Overview (System Architecture)

The TPMS system consists of two modules:

- BLE communication module (internal sensor installed in the tire/wheel).
- Smart terminal (Android/iOS phone) running the TPMSII app.

3. Safety, Compliance and Notes

- ⚠ Internal sensor installation must be performed by a professional technician.
- ⚠ Be careful when checking the app while driving; stop safely before viewing.
- ⚠ This product reads tire pressure and temperature but cannot prevent sudden tire-related accidents. Use high-quality tires.
- ⚠ After installation, inflate the tire and check for air leakage.
- ⚠ Due to different Android phone hardware performance, data transmission may be delayed (normal).

4. Key Specifications

Core parameters (refer to the latest product specification for full details):

Core / chip: ARM M0 / DA14531	Communication: Bluetooth 4.0/5.0 (BLE) (broadcast: TPMS1-4_XXXXXX)
Working voltage: 3 V; static current: ≤ 1.4-1.8 μA	Pressure range: 0-1500 kPa; accuracy: ±1% kPa
Temp. accuracy: ±1.5 °C	Response time: ≤ 5 s
Waterproof: IP67; humidity: 95% max.	Operating / storage temp.: -30 to +70 °C (internal)
Battery: 350 mAh (internal); life 3-5 years	Dimensions / weight: 78.5 × 49.3 × 18 mm; 30.8 g

5. Standard Installation & Pairing Workflow

Recommended SOP for workshops/installers:

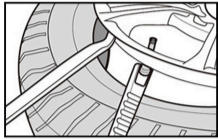
1. Before installation: verify sensor IDs and tire positions. Each sensor has a unique ID.
2. Mount internal sensors in the correct wheels according to the position mapping on the card (1/2/3/4).
3. Complete tire mounting, inflate to the correct pressure, and verify no air leakage.
4. Perform wheel balancing (test and adjust as needed).
5. Open TPMSII app and bind sensors: recommended by scanning the "one-clicking binding" QR card or scanning each sensor ID code.
6. Alternative binding: choose "Auto Pair" and press "Search".
7. For internal sensors: if data is not received, drive the vehicle >20 km/h for about 2-3 km and verify again.

6. Feature Guide (App) & Alerts

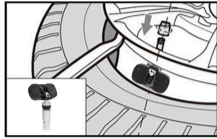
The app displays tire pressure and temperature in real time. When readings are abnormal, the app can trigger alerts and display tire status.

6.1 Inner Sensor Installation (if your kit includes inner sensors)

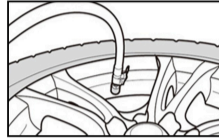
- Inner sensors should be installed by a professional technician during tire mounting.
- After installation, inflate the tire and open the app (choose Auto Pairing). Tap Search to bind the sensor shortly.
- If no data is obtained, drive above 20 km/h for about 2-3 km to activate and obtain data.



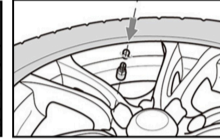
1. Remove tire cap



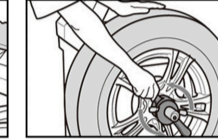
2. Adjust the sensor angle according to the angle of the hub and install it



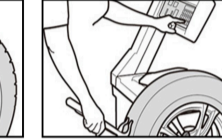
3. Pump up the tire



4. Put valve cap



5. Test balancing



6. Adjust balance

7. Troubleshooting (Quick Reference)

Symptom	Solution
No data	Confirm phone Bluetooth 4.0+ is ON, stay close to the vehicle, and re-try binding.
Wrong position	Confirm ID codes and re-bind in the correct order.
Internal sensors	Drive >20 km/h for ~2-3 km to obtain data after installation.
Data delay	May occur on some Android phones (normal).

8. Incoming Inspection Checklist

- Verify model (V102A) and quantity.
- Check that the QR code card and sensor IDs are present and legible.
- Random sample test: install/bind one sensor to verify data is displayed in TPMSII (where feasible).

9. After-sales Information to Collect

- Product model and batch information (if available).
- App name and phone model / OS version.
- Sensor ID codes and the tire positions they are installed/bound to.
- Problem description, photos/videos, and steps to reproduce.

10. Storage, Transportation and Handling

- Storage temperature: -30 to +70 °C (internal).
- Keep the product and QR card in the original packaging until installation.
- Avoid strong impact or deformation of the sensor during handling.

11. Disclaimer

Product specifications may change without notice. The content in this document is for reference only.