

Truck Bluetooth TPMS Communication Protocol

Ble ADV data segment format structure: len + type + data

02 01 06	03 03 B0 FB	12 FF AC 00 B3 45 50 03 12 5D 01 0F 10 11 DF 9D EC B3 05
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02: (1 bytes) indicates the length of the first small segment of the ADV packet

01: (1 bytes) Flags

06: (1 bytes) General Discoverable, BrEdrNotSupported

03: (1 bytes) indicates the length of the first small segment of the ADV packet

03: (1 bytes) Complete List of 16-bit Service class UUID's

B0 FB: (2 bytes) UUID

12: (1 bytes) indicates the length of the first small segment of the ADV packet

FF: (1 bytes) Manufacturer specific data

AC: (1 bytes) Identification code (fixed)

00: (1 bytes) Item no (fixed)

B3: (1 bytes) Sensor Voltage ($B3(179) \times 0.01 + 1.22 = 3.01V$)

45: (1 bytes) Pressure data unit Kpa $1FD(256+253) \times 3.144 = 1600.296$ Kpa

50: (1 bytes) Temperature data unit °C ($50(80) - 55 = 25^{\circ}C$)

03: (1 bytes) sensor status information (00: Normal/sleep 01: Deflation / leakage

02: Inflation 03: Start-up 04: Power-on 05: Wake-up)

12: (1 bytes) TPMS SW version

5D: (1 bytes) persist

01: (1 bytes) Pressure data High The specific calculation formula is described in the barometric pressure section.

0F: (1 bytes) persist

11 DE 9D EC B3 05: (6 bytes) Mac address 05:B3:EC:9D:DE:11 Bluetooth Mac address.

The MAC address sequence is arranged from last to first. It is actually a 6-byte combination derived from the chip ID (4 bytes) and custom content. ID1: ID2:

ID3: 00: ID3: ID4 binds the first three digits of the MAC address, i.e., ID1, ID2, ID3

state diagram

