

TPMS Bluetooth BLE 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	19	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 ($B3(179)*0.01+1.22=3.01V$)

45: (1 bytes)Pressure data unit Kpa ($45(69)*3.144=216.936Kpa$)

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

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

19: (1 bytes)persist

0F: (1 bytes)persist

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