

Technical manual

(1) Module information

Product name: TPMS SENSOR

Model name: TMSS8E4

Brand: BH SENS

Manufacture Name: Baolong Huf Shanghai Electronics Co.,Ltd.

Address: No. Building 3, Lane 1099, Zhangjing Road, Dongjing Town, Songjiang District, Shanghai

City, P.R. China

Power: Battery (3.6V)

Rated current: <10mA

Operating frequency : 433.92MHz

Modulation Frequency deviation: $\pm 45\text{KHz}$

Transmit Power: <5 mW

Modulation: FSK

RF code: Manchester

Antenna gain: -2.2dBi

Receiver Low frequency: 125kHz

Modulation: ASK

LF code: Manchester

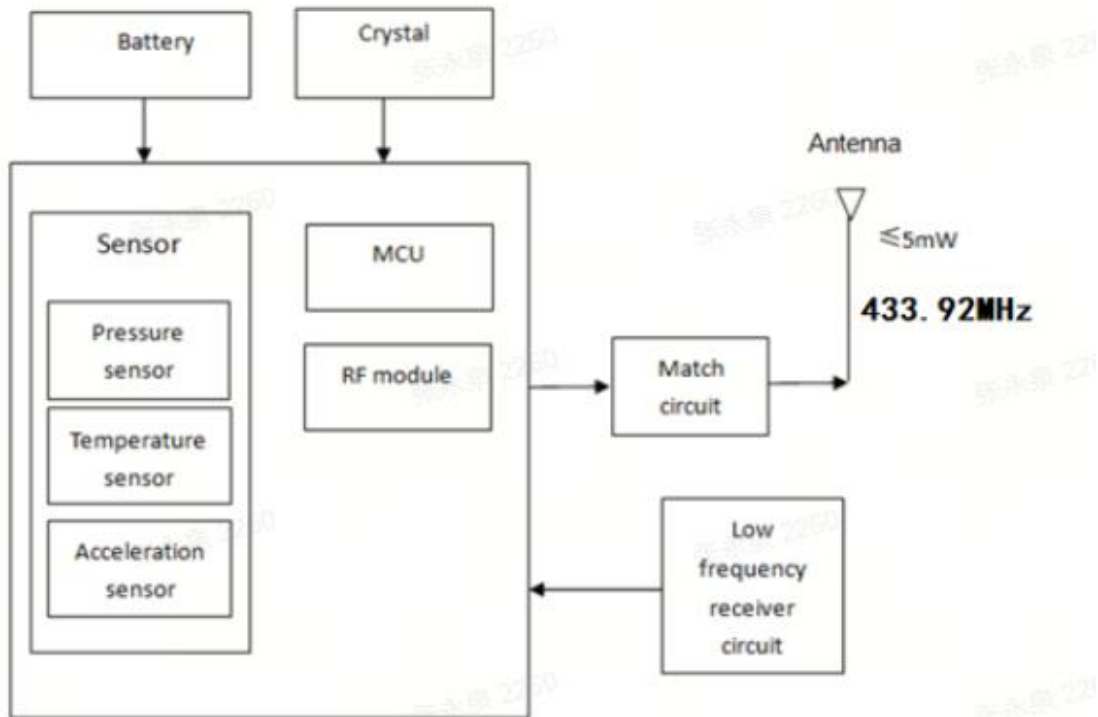
Operating temperature range: $-40^{\circ}\text{C}\sim+125^{\circ}\text{C}$

Software version: V1.0

Hardware version: V2.0

The module is powered by 3.6V battery, the RF center frequency is 433.92MHz, the modulation frequency deviation is $\pm 45\text{KHz}$, and the modulation mode is FSK. In normal operation mode, the sensor function module will periodically detect the tire internal pressure and temperature information. The real-time data collected is sent to the receiver by RF circuit. In addition, the pressure, temperature, sensor ID and other information inside the tire can be read in real time through the hand-held low-frequency tool.

(2) Diagram introduction



Description:

1. This module contains a highly integrated chip, which includes microprocessor core, pressure sensor, temperature sensor, acceleration sensor and RF function module. The RF center frequency is 433.92MHz.
2. The module is powered by 3.6V battery. During the working period of the sensor, the microprocessor periodically reads the pressure and temperature information inside the tire through the pressure sensor and temperature sensor.
3. This module uses crystal oscillator circuit recommended by chip to provide accurate clock frequency for microprocessor.
4. As the core of the sensor, the microprocessor sensor function module is responsible for collecting tire pressure, temperature, acceleration and other information.
5. The sensor contains low-frequency function module, which is used for hand-held tools to read real-time data of sensor or upgrade software.

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ce matériel est conforme aux limites de dose d'exposition aux rayonnements, CNR-102 énoncée dans un autre environnement. cette équipement devrait être installé et exploité avec distance minimale de 20 entre le radiateur et votre corps.