

# DESCRIPTION OF TIRE NUMEN TPMS

## EMITTER DESCRIPTION

1. Emitter Power Voltage: D.C 3.6V
2. Basic Frequency: 2MHZ
3. Emissive Frequency: 433.92MHZ    Modulating manner: FSK

### 4. Work process:

While power on, C2 and C9 output power 3.6V steadily to IC1 SP12 and IC2 MC608HC908RF2MFA(The basic frequency of IC1 and IC2 is 2MHz). IC1 is a sensor, it measures the pressure, temperature, acceleration and voltage. When the condition including pressure and temperature is changed:

$$\Delta(P) \geq 5\text{KPa} \ \& \ \Delta(T) \geq 3$$

IC2 outputs 12 bytes data.

C5 and Crystal Y1(13.560MHz) produce carrier frequency. The IC2 “RFOUT” Pin outputs 12 bytes data to “Filter circuit” L1,L2,C3,C7, which are sent out by antenna out to space.

Test program1:

While connecting P7 with GND, then power on, the program enters test program1, the IC2 sends out 12 bytes to space every 12s.

Test program2:

While connecting P1 with GND, the power on, the program enters test program2, the IC2 sends out 12 bytes to space continuously.