

**Tire Pressure Monitoring System
Model AETM-1 Sensor**

Description of circuitry in device

The sensor operates on 9v Battery stack that is constructed with 3 individual lithium battery together. The sensor module has three boards: Sensor/Amplifier, Transmitter and CPU. The Sensor/amplifier board performs two functions: 1. Generates voltage according to pressure in the tire. 2. Amplifies the signal as required. CPU board receives the sensor data and converts the analog data to digital format. This formatted data is then sent to transmitter board, which transmits out at 433.92MHz + or -75KHz.

The transmitter is designed with a SAW resonator 433.92 MHz oscillator and built-in loop antenna. The CPU runs at 4MHz RC clock generated internally.