Technical Description, Model:00605 outdoor Thermometer

The Outdoor Temperature & Humidity sensor is a MCU controlled transmitter working at 434MHz, Powered by 2 pcs AA battery. The circuit of outdoor thermometer and Humidity sensor has 2 main parts, MCU circuit and transmitter.

MCU

The MCU (JL0603) is the heart of Outdoor thermometer and Humidity counter, The system clock is control by (32.768KHz) crystal. The MCU will decode incoming signal from pin 4 (Temperature sensor) and pin3 (Humidity sensor) send periodic signal via pin 18.

Transmitter

The oscillator (Q1,C31,C32,C33) working at 434MHz is controlled by a SAW X1 resonator, the output is coupled to output amplifier (Q2). A band-pass filter (L32, C39, C40 and C41) is placed between the output amplifier (Q2) and the built-in antenna. The RF signal is generated when the positive (refer to ground) part of an encoded pulse. A pulse width modulation RF signal is being sent.