

Technical Description

Introduction

This unit is a transmitter equipped with temperature Sensing ability and transmits temperature data through RF carrier in frequency of 433.92MHz. It is designed for outdoor usage and it is powered by 2 piece. 'AAA' size battery cells.

MCU

MCU detects temperature data from the thermometer circuit and transmit those data by 433.92MHz RF transmitter circuit.

Thermometer Circuit

Thermometer circuit was using a thermistor for temperature detection. Its resistance reduces when temperature increases. The MCU detects this circuit resistance and converts it to temperature data.

RF transmitter Circuit

It is 433.92MHz AM transmit modulate. RF transistor oscillates in frequency of SAW resonator, which is 433.92MHz.

Red LED

When the data is being transmitted the LED would be turned ON for indication.

°C/°F conversion switch

This switch is used to select degree of Celsius and degree of Fahrenheit.

Switch for Channel selection

This switch is used to tell the MCU which channel is selected.

Low Battery Inspect Circuit

This is MCU detects low battery signal with this circuit. The low battery signal would also be transmitted through RF, 433.92MHz carrier.

Reset Circuit

It is used to reset the unit.

Short pads for operation mode

It is used to select Test mode at the production. Customer cannot see the short pads.

