



IDT Technology Limited

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## Technical description of THR228N

THR228N is a Remote outdoor thermo sensor. The temperature is measured by the MCU and encoded to transmit to the main receiver unit through 433.92 Mhz RF signal by Analog Modulation ON/OFF keying.

It composes a controller part and a transmitter part. The transmitter is basically a Colipptis oscillator, where XT1 are used to determinate the resonant frequency that is 433.92MHz.

Transistor Q1 whose  $f_T$  is greater than 6GHz, provides a good frequency response to the circuit. There is a LC filtering circuitry used to suppress harmonics of the oscillator. Typical inductor and capacitor matching circuit is employed to match the impedance of the antenna.