



**IDT Technology Limited**  
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## **Technial description of THRN122N**

THRN122N is a remote thermo sensor transmitter. It converts temperature measurement into OOK signal format and transmits through the RF channel of 433.92MHz. It is consisted of 2 parts: Control part and transmitter part. The MCU outputs the digital data, then this data will be modulated into the Colpitts oscillator, where the capacitor C416 and the SAW X401 are used to adjust the operating frequency to 433.92MHz. The transistor Q404, with its  $f_T$  greater than 6GHz, provide a good frequency response to the oscillator circuitry. The high frequency component of the data is suppressed by the RC filter, consisted of the resistor R415 and capacitors C414 and C415.