



IDT Technology Limited

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## Technical descriptions of BTHR918

BTHR918 is the Remote Baro Thermo Hygro sensor unit of the Remote Weather Station system. It consists of two parts, one part is the controller part and the other part is the transmitter part. The controller part provides the feature of weather forecast (by sensing the pressure change trend). Pressure sensor being used is P1 (SPX5049A) and analog signal is converted into digital signal then input to Micro-controller U1. Temperature and Humidity are measured by sensing the thermistor H2 and humidity sensor H1. The transmitter part is basically a Colpitts oscillator, where C4, C6 and X1 are used to determinate the resonant frequency that is 433.92MHz. There is a LC filtering circuitry, used to suppress harmonics of the oscillator. An inductor, L3, is employed to match the impedance of the antenna.