



IDT Technology Limited

萬威 科 研 有 限 公 司

Technical Description of PCR800

The PCR800 is Pluviometer And Transmitter . It is operated by 2 pieces of size AA batteries (DC 3V). The voltage supplied to MCU is regulated to DC1.5V, so that the performance of the product can be guaranteed before the battery voltage drops to 1.5V.

PCR800 is a remote transmitter. It converts wake up 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 SAW XT1 are used to adjust the operating frequency to 433.92MHz. The transistor Q1, with its f_T greater than 6GHz, provide a good frequency response to the oscillator circuitry. There is a LC filtering circuitry, L1 and C3, that is used to suppress harmonics of the oscillator. Capacitance C15 is employed to match the impedance of the antenna.



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Model: PCR800

Reason for Change:

1. Cost down propose.

Effect on Change and Details of Change:

1. Reduce the main PCB size and Change the SMT 0805 capacitor and Resistor to SMT 0603.

2. Change the method to open the battery door.

3. No need the waterproof o-ring and 8 screws for the battery door.

4. Delete both metal drain screen on the plastic base and use plastic to replace.

5. Delete the metal funnel screen.

By


Signature

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