

Wireless Magnetic Sensor (218WR)

This product design for home or office safe protect system/ subsystem, it detect vibration and window/door open trigger through radio frequency link to T018/T016/T015 system.

Schematic description

- Vibration detect circuitry: mechanical vibration switch to complete sense the mechanical vibrate, and through R15, Q4, R1 amplify then trigger MCU to send a RF signal link the system and let the system process.
- Magnetic sensor circuitry: magnetic switch detect window or door from close to open then through D3, Q4, C15, C16, R15 as small signal amplify and trigger the MCU to send a RF signal link the system.
- Data modulation and base oscillator: L1, C6, C7, R12, Q3, R10, R4 complete radio frequency oscillator, SAW1 (SAW resonator) control and regulate the oscillate frequency to 433.92MHZ \pm 75K, from MCU data signal through R4 control radio frequency generate ASK modulation.
- Battery low detect: Q2, R8, Q1, R6, R7, R11 complete battery voltage compare and detect, when the battery low MCU will enable indicate BAT. LOW LED flashes and sends the signal to system.
- Power supply circuitry: battery though regulator IC (HT7130) generate 3.0V voltage supply MCU and other circumjacent working.
- MCU: MCU1 (78P153) composing signal process and control center.