

# **Operation Principle of the 13000 Wireless RS485 Interface**

1. Power supply is 24VAC or 12VDC , and use U3 to regulate 3.3VDC for U1, U3 ,U4.
2. U1 for the MCU , and receive and send the data through it . D1,D2,D3,D4,D5 LED for the display the status for the work .
3. U2 for the A/D modulate IC , when the data send from J2 , and converts digital signal to MCU U1.
4. MCU send the data to TR1000 through U2 74HC02 by Tx pin. And receive the RF signal by Rx pin .
5. U3 TR1000 is RF IC , it receive the signal by RCVDATA , and send the signal by TXMOD . PTT is the switch for RX and Tx status select. ANT1 for the antenna .
6. J2 connector connects with 8870 thermostat communication terminal.