

JZ866 Mini Power Handset Wireless Module

User's Manual



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Before using the product, please carefully read the user's manual. Any question in technical, you can contact us. Tel: +86-755-81353151 , 83563518.

About JZ866

JZ866, the mini power wireless module, is used as the wireless data transmission in short distance in HT2680/2600 handset appropriate.

With the small size, weight and power consumption and good stability and reliability, it has the function of bidirectional data sign transmission, test and control.

It is used for Wireless meter reading, such as water meter, electric meter and gas meter, parking meter, intellectual card, electronic weighing apparatus, meter for checking on work attendance, queue wireless meter, building control, shipping company control, alarm system, intelligent equipment, Automatic data collecting system; Industrial remote control and remote test building automation, safety and security, powerhouse equipment wireless monitor, entrance control system, etc.

JZ866 Feature

1. Ultra low power transmission

Transmission power: < 10mW, high receiving sensitivity: -110dbm,

Size: 46mm*32mm*7mm

2. Low power consumption

Receiving current<11mA , transmission current<45mA

3. ISM frequency band, not requiring on application of frequency point

Carrier frequency of 428---433MHz , also capable of 868/915MHz.

4. High anti-interference and low BER (Bit error Rate)

Based on the FSK modulation mode, it adopts the efficient communication protocol. The actual bit error rate of 10^{-5} ~ 10^{-6} can be achieved when channel bit error rate is 10^{-2} .

5. Long transmission distance

Within the range of visibility, the reliable transmission distance is (BER= 10^{-3} /1200bps) >300m when the antenna height is greater than 3m (BER= 10^{-3} /9600bps).

6. Transparent data transmission

Transparent data interface is offered to suit any standard or nonstandard user protocol. Any false data generated in the air can be filtrated automatically (What has been received is exactly what has been transmitted). The charge time for receiving and sending <10ms.

7. Multi-channel and speed

The standard JZ866 configuration provides 8 channels to meet the multiple communication combination of the users. It has baud rate to be chosen such as 1200bps、2400bps、4800bps、9600bps、19200bps. The wireless transmission rate is direct ratio with baud rate of interface to meet user's equipment requirement.

8. High speed wireless communication and large data buffer

When the speed rate in the air is quicker than interface's, allowing to transmit unlimited length data at one time, when the speed rate is slower or equal the interface's, allowing the transmission of 255 Bytes long data frames at one time for more flexible programming by users.

9. Intelligent data control and the user doesn't need to prepare excessive programs

Even for semi duplex communication, the user doesn't need to prepare excessive programs, only receiving/transmitting the data from the interface. JZ866 will automatically complete the other operations, such as transmission/receiving conversion in the air, control, etc.

10. High reliability, small and light

Single chip radio- frequency integrated circuit and single chip MCU are used for lessened peripheral circuits, high reliability, and low failure rate.

11. Watchdog monitor

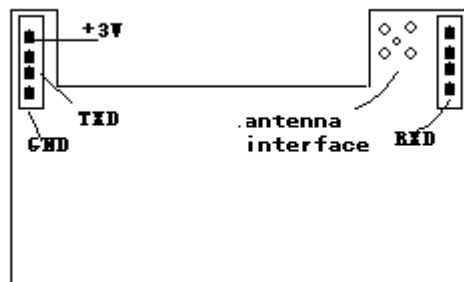
Watchdog monitors the inner function, so that change the traditional product structure and improve the product reliability.

12. embed and install expediently

When embed in HT2680/2600, take out the infrared plug and plug in the JZ866.

Application of JZ866

1、Measure



JZ866 interface chart

2、JZ866 interface definition :

- 1). GND: Power supply/Ground
- 2). +3V: +3V DC
- 3). RXD : TTL Serial data receiving
- 4). TXD : TTL Serial data transmitting

3、JZ866 connect with terminal unit

JZ866 is provided with TTL interface , when connect whit HT2680/2600 handset , open HT2680/2600 shell , take out the infrared plug ,let JZ866 plug aim at the needle of HT2680/2600 ,plug in the socket directly. When you programme in HT2680/2600 , Must set the COM interface to infrared interface.

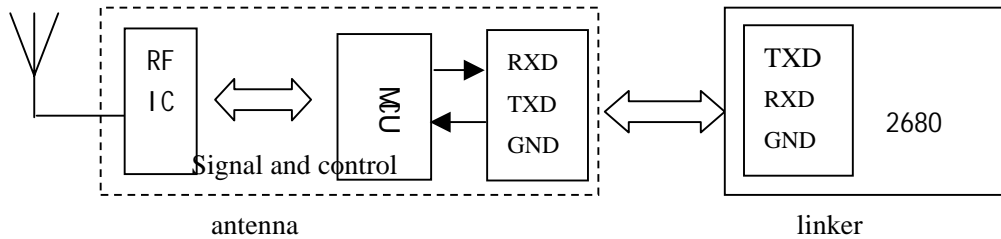
If you want to modify the speed rate or channel of JZ866, please take out JZ866 form HT2680/2600 , you can make a circuit board of TTL to RS232 , Connect with JZ866 according to the Interface of JZ866 , then connect with COM port of PC , Use the RF Module software Change the parameters of JZ866. or ask for

JZ866 communicate protocol from our company , programme in HT2680/2600 use the protocol , so you can Modify the parameter expediently by yourself.



Notes: Advice user tell our company the parameter of JZ866(COM baud rate,RF baud rate ,channel etc.) before booking goods, We can set the parameter according your need , avoid trouble of changing the parameters. Otherwise the parameters of JZ866 be set to default value.

HT2680



JZ866 RF data Module App elements chart

JZ863 parameters setting

JZ866 main parameters: COM baud rate and verify , RF baud rate, Channel and frequency。 You can change these parameters by our RF Module soft. When RF baud rate is faster than COM baud rate , One frame Can transmit limitless data. When RF baud rate is not faster than COM baud rate , One frame Can transmit 255 bytes most. You can set the rate according your need. The general Power supply is 5V DC.

Two JZ866 communicate must have condition as follow:

1. Their channels (i.e. frequency) are the same.
1. Their RF rates are the same.
2. RF Module Com baud rate and verify is agree with its equipment or PC that it connects with.

Parameters default value:

Channel : 1
 Interface speed rate : 9600BPS
 Interface verify : none
 Speed rate in air : 9600BPS

Channel and frequency list

Channel	Frequency	Channel	Frequency
1	428.0028MHZ	5	432.1685MHZ
2	429.0012MHZ	6	431.5020MHZ
3	433.3020MHZ	7	430.0764MHZ
4	433.9164MHZ	8	434.5308MHZ

Technical specification of JZ866

Modulation mode: FSK

Working frequency: 428---433MHZ

Transmission power: 10mW

Receiving sensitivity: -110dBm

Transmitting current: <45mA

Receiving current: <11mA

Channel speed rate: 1200/2400/4800/9600/19200Bit/s User can Choose one

Interface speed rate: 1200/2400/4800/9600/19200Bit/s User can Choose one

Change time for receiving and sending: <10ms

Interface data format: 8E1/8N1/8O1

Power supply: 2.8--3.3V (TTL) DC

Working temperature: -20 ~ 65

Working humidity: 10% ~ 90% relative humidity without condensation

Dimension: 46mm*32mm*7mm (not include antenna)

Attachable Communication with other Model: JZ862/JZ863/JZ864/JZ866