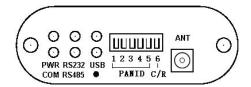
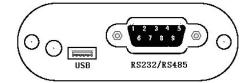


User's Manual of PC2ZB communication module V1.0Copyright © 2015 Xiamen Haiwell Technology Co., Ltd

1.Product Model List

Model	Power Consumption (5VDC)	Dimension
PC2ZB	0.1VA	48*70*24mm





2. Indicator Description

- ①POW: Power indicator, green. ON Power good; OFF Power error.
- ②COM: Network indicator, red. Continuous On It has joined the network; Slow flashing It is searching and networking (250ms ON and 250ms OFF); Rapid flashing - it is receiving data (30ms ON and 30ms OFF).
- ③RS232 / RS485 / USB: communication indicator, green. The indicator flashes when using the corresponding communication method.

3. Specifications

Item	Specification	
Power supply	USB port power supply(+5V)	
Environment temperature	Operating temperature:0~+55 ℃ Storage temperature:-25~+70 ℃	
	Humidity: 5~95%RH, No condensation	
Operating Frequency	2.4~2.5GHz	
Transmit Power	+14dBm	
Receiver sensitivity	-95dBm	
Allowed relay/routing Number	Up to 6 by default	
Protocol conversion	Zigbee<=>modbus	
Maximum communication rate	38400bps	
The number of channels	6	
PANID range	1~31	
The largest network capacity	65535	
Reliable transmission distance	150m (No hinder , linear distance)	
ZigBee protocol version	ZigBee Pro	
Network type	Mesh	
Node types	The coordinator, routers	
Antenna type	SMA antenna	

4. Module Function Specification

PC2ZB is a wireless communication module for the PC side. With this module, HaiwellHappy and other PC software can control and operate the PLC which extends with H01ZB wirelessly.

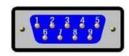
5. Networking Steps

1. Connect the PC2ZB module to PC through USB / RS232 / RS485 Port. While attempting to connect via RS232/RS485 port, the USB port must still be connected, for its role is to provide +5V operating voltage supply.

- 2. Configure the host PLC address (through the DIP switch), ensure that the address are unique within the network.
- 3, Choose one of the H01ZB or PC2ZB Zigbee modules within the network (anyone will be fine but just only one) serves as the coordinator. The method is: Dialed the sixth position of DIP switch to "ON", the other modules on the same network serve as routers, the same position can only be dialed to "OFF". See the illustration and presentation of Section VII.
- 4, For all modules within the network, the 1 to 5 position of the DIP switches should be set to the same value (as the network's PANID, ranging from 1 to 31).
- 5, After power up, the module will automatically search network. If not join the network, COM indicator will periodically flashes; after joining the network, COM indicator stays on.
 - 6, Then ,you can use HaiwellHappy PC software to control the PLC which extends with H01ZB wirelessly.

6. Connecting cable Description

Use RS232 Cross Connect to PC serial port. the port pin is defined as follows:



9Pin DB9 male

 $2 \longleftrightarrow RXD$ $3 \longleftrightarrow TXD$ $5 \longleftrightarrow GND$ $6 \longleftrightarrow A+$ $8 \longleftrightarrow B-$

7. Set The Address

As was shown in the picture on the right side, the PC2ZB module's six positions DIP switches, The first five positions of DIP switches(1-5) are used for setting the network ID, the DIP switches' sixth position works as a coordinator / router switch.when it's dialed to "ON", this module will be treated as coordinator, and the others in the same network serve as routers in which the sixth switch can only be dialed to "OFF".



When users want to set the network ID, as follows: The black part in the picture represents the position of the DIP switch, dialed one of them to "ON" indicates this bit is 1, while t dialed to "OFF" indicates the bit is 0.In the above picture the first one is "ON". 2 ~ 5 is "OFF", reflected to the ID number, in binary: DIP switch first position represents LSB(b0), the 5th represents MSB (b4). Thus , The first five switches represent a binary number from 00000 ~ 11111, converted the binary number to decimal to obtain the network ID number. The DIP switch positions in the picture above indicates 00001, that is decimal number 1, indicating that the network ID number is 1: legitimate network ID ranging from 1 to 31.

8. Precautions For Use

- 1, In strict accordance with the instructions of the fifth form a network.
- 2, One network can only have one coordinator, when there is a module servers as the coordinator (the DIP switche's sixth position dialed to "ON"), the other modules must be dialed to "OFF" state (serves as routers).
- 3, Allow multiple hosts access across each other in the same network, but when there are two or more than two hosts access the same host, will result in communication error.
 - 4. It should be ensured that the host address is only one kind within the same network.

Thanks for choosing Haiwell PLC, If you have any guestions about our products or services, please let us know! Haiwell website: http://www.haiwell.com http://www.haiwell.cn

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