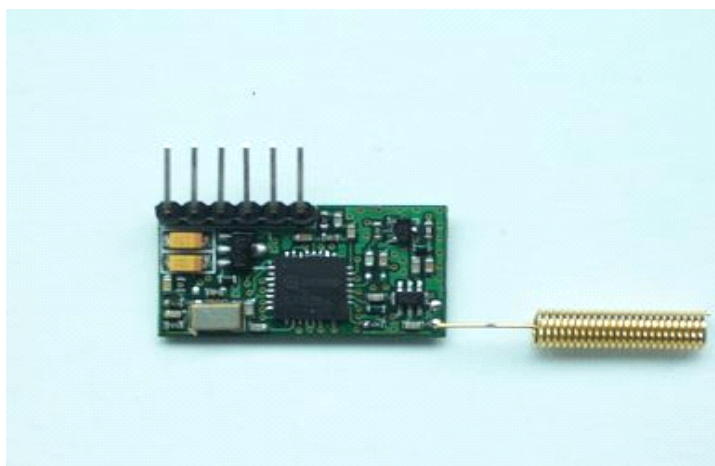


KYL-500S Mini-size Wireless Data Transceiver Module



KYL-500S is a Mini-size RF transceiver. It is usually used for restricted space application. With TTL interface, it is widely used for micro-controller wireless communication and other TTL level port communication systems. It has high reliability and good performance.

I. Technical specification

PERFORMANCE	
Power Output:	50mW(Default), (10~100mW optional)
RF Line-of-sight Range:	1000m@1200bps; 600m@9600bps
RF Effective Rate:	1200/2400/4800/9600/19200bps
Space Channel:	1MHz(Default),(12.5/25KHz/other customization)
Bandwidth:	<25KHz
Receiver Sensitivity:	-123dBm@1200bps(1% BER)
NETWORKING	
Networking Topology:	Point-to-point, point-to-multipoint
COMPATIBILITY	
KYL-200 and KYL-300 series	
POWER	
Supply Voltage:	5V DC (default), 3.3-3.6V(optional)
Transmit Current:	<40mA

Receive Current:	<20mA
Sleep current:	<30uA
GENERAL	
Communication Mode:	Half-duplex
Frequency Band:	400-470MHzMHz
Channel:	8(default),16/32/64(optional)
Interface:	TTL
PHYSICAL PROPERTIES	
Size:	28mm×15mm×10mm (excluding antenna base and data pin)
Weight:	20g
Antenna Base:	50Ω, SMA
Operating Temperature:	Industrial:-40℃~+85℃(TCXO)
Frequency Stability:	±2.5ppm Industrial

II. Application Field

KYL-500S the micro power wireless transceiver data module is suitable for:

- * Wireless alarm and security systems
- * Wireless scanner
- * Building automation, security, wireless monitoring and control
- * Wireless data transmission, automatic data collection system;
- * Sports training & competition;
- * Wireless POS, PDA wireless smart terminal;
- * Wireless telemetry Charging for parking, parking lot;
- * Wireless modem Automobile inspection and four-wheel orientation;
- * Point to multi-point wireless network

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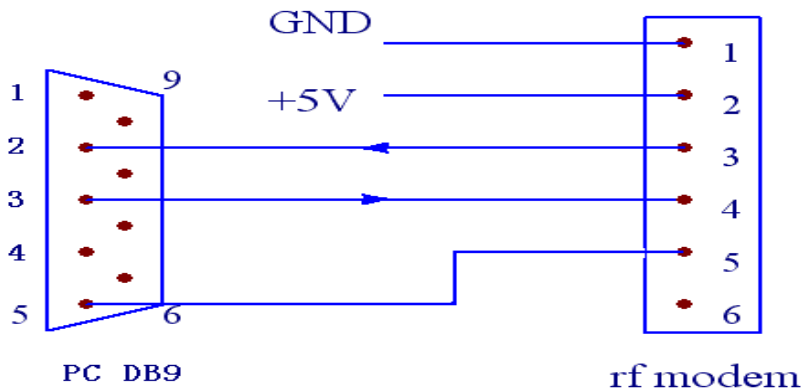
III. How to Use It

1. Default 5V Power supply
2. PIN Definition (6pin)

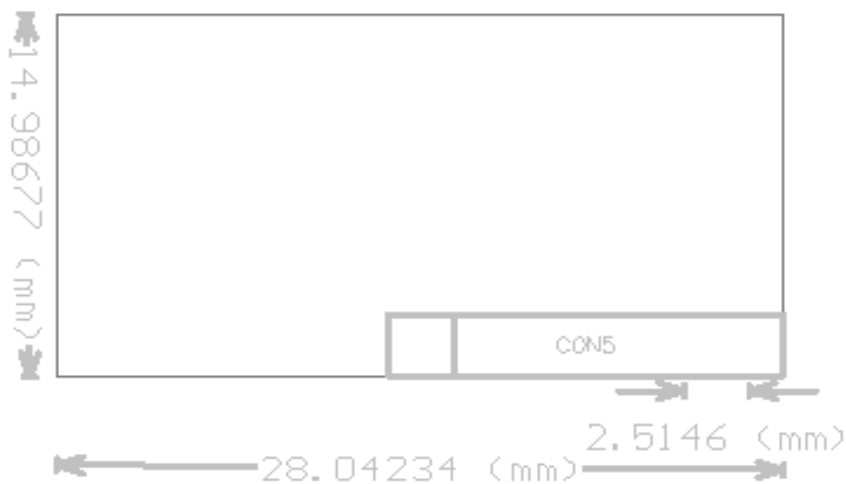
Table 1: JP1 Pin Definitions and connection methods

Pin No.	Signal Name	Function	I/O	Electronic Level	Remarks
1	GND	Grounding of power supply	-		
2	VCC	Power supply DC	-	5 V	
3	RXD/TTL	Data receiving (TTL Level)	I	TTL	
4	TXD/TTL	Data transmitting (TTL Level)	O	TTL	
5	IN	External input	I	TTL	Low level invalid
6	OUT	Electronic Level output	O	TTL	

3. The connection schematic between computer and the RF module



4. Installation demesion



5. The Function-indicator light

- a. The red and green LED indicator turn on for 500mS when power on.
- b. The red LED indicator is always on when transmitting data. It is off when finishing data transmitting.
- c. The green LED indicator is always on when receiving data. It is off when finishing data receiving

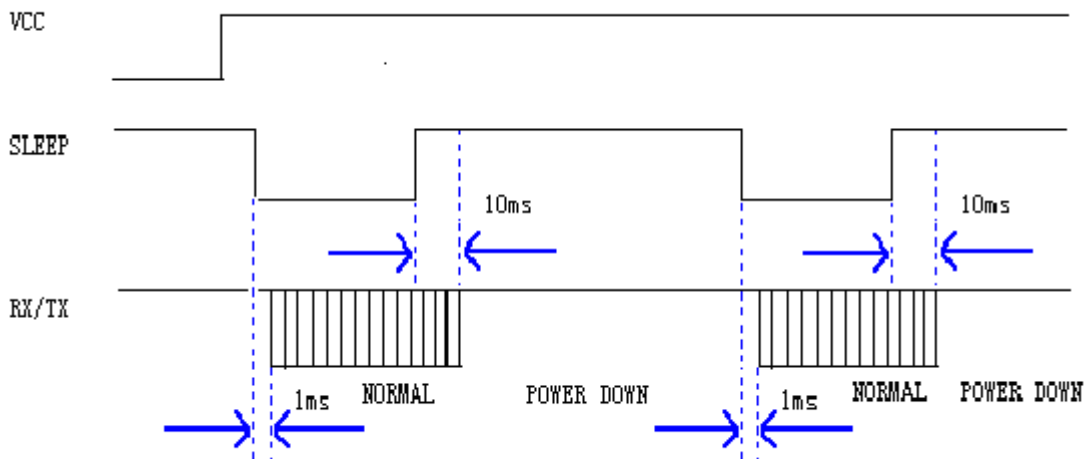
6. Parameter setting by our software

You can use our software KYLCOM.exe to read or set the parameter on computer. When you connect RF module to PC by the testing cable, please remember to connect the DB9 as well as USB port to computer.

Corresponding frequency points at 433MHz of 1-8 channels

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	429.0325MHZ	2	430.0325MHZ	3	431.0325MHZ	4	432.0325MHZ
5	433.0325MHZ	6	434.0325MHZ	7	435.0325MHZ	8	436.0325MHZ

7. About the sleeping mode



8. Standard package

- (a). One KYL-500S RF module
- (b). One 6-pin ribbon cable
- (c). One coil antenna like this following

If you have special requirements, please contact us for more details.