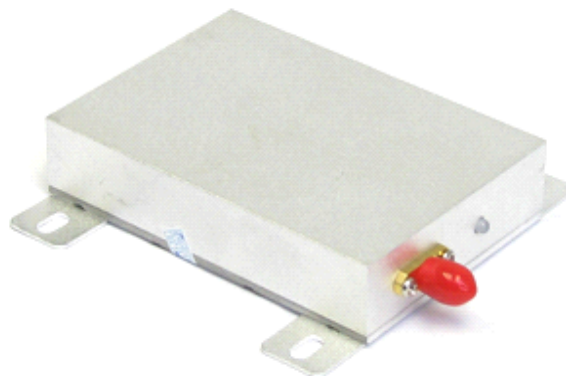


KYL-300H Long Range Radio Module



KYL-300H 5W wireless radio modem, with high power, long transmission distance, is widely used for industrial remote control. This module can be connected with micro-controller, PC, RS485 equipments and other devices with UART port directly, for example wireless PLC communication, SCADA and so on.

I. Technical specification

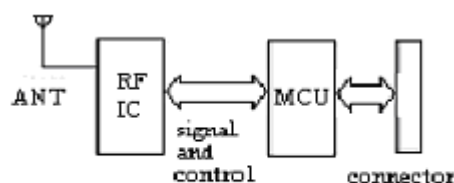
PERFORMANCE	
Power Output:	5W(Default), (6W/7W optional)
RF Line-of-sight Range:	10Km@1200bps; 8Km@9600bps
RF Effective Rate:	1200/2400/4800/9600/19200bps
Space Channel:	1MHz(Default), (12.5/25KHz/others Customization)
Bandwidth:	<25KHz
Receiver Sensitivity:	-123dBm@1200bps (1% BER)
NETWORKING	
Networking Topology:	Point-to-point, point-to-multipoint
COMPATIBILITY	
KYL-300 and KYL-200 series	
POWER	
Supply Voltage:	12V DC
Transmit Current:	<1.5A

Receive Current:	<30mA
Sleep current:	<1mA
GENERAL	
Communication Mode:	Half-duplex
Frequency Band:	400-470MHz
Channel:	8(default),16/32/64(optional)
Interface:	TTL/UART, Non-Standard RS232/RS485
PHYSICAL PROPERTIES	
Size:	85mm×58mm×16mm (excluding antenna base and data pin)
Weight:	100g
Antenna Base:	50Ω, SMA
Operating Temperature:	Industrial: -40℃~+80℃(TCXO)

II. Application Field

- * Automatic Meter Reading (AMR);
- * Wireless alarm and security systems;
- * Building automation, security systems, wireless monitor;
- * Wireless data transmission, automatic data collection system;
- * Wireless POS, PDA wireless smart terminal;
- * RF transmitter, Wireless electronic display screen and Queuing machine;
- * Wireless telemetry; remote control and access control system;
- * Wireless modem automobile inspection and four-wheel orientation;
- * Wireless sensor, Industrial wireless remote control;
- * Data communication in the aspects of railway, oil field, dock and army.
- * LED display in thruway and public place;
- * Point to multi-point wireless network.

III. How to Use It

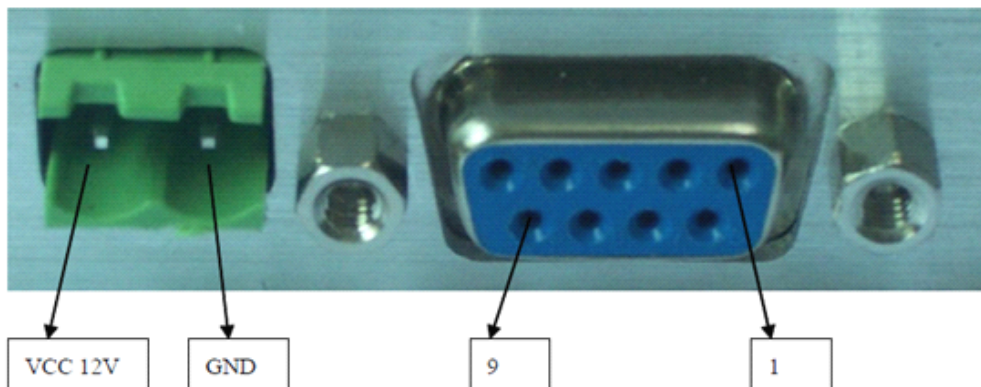


KYL-300H Principle map

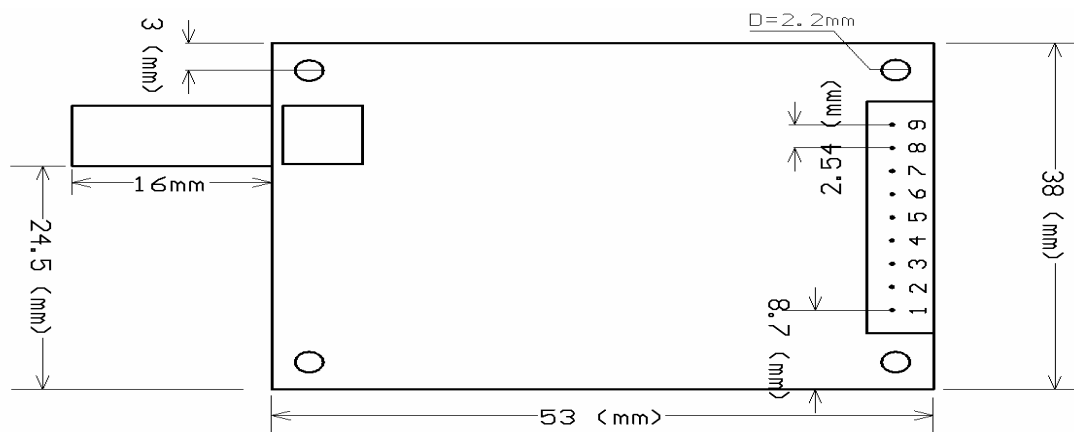
1. Default 12V Power supply
2. PIN Definition (9pin)

Pin No.	Signal Name	Function	Level	Connection with terminal	Remarks
1	GND	Grounding of power supply		Ground	
2	A(TxD)	RS-485 A or TxD of RS-232			
3	B(RXD)	RS-485 B or RXD of RS-232			
4	NC				
5	SGND	Signal			
6	RXD/TTL	Data receiving		TTL Level	
7	TXD/TTL	Data transmitting		TTL Level	
8	SLEEP	Sleep control	TTL	Sleep signal	Low level valid
9	TEST	Factory testing	TTL		

3. The connection schematic between computer and the RF module



4. Installation dimension:



5. The Function-indicator light

- a. The LED indicator turns red for 0.5S when power on.
- b. The LED indicator turns green continually while receiving data from air.
- c. The LED indicator keeps dark when the module is in sleep mode.

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.

Channel No.	Frequency	Channel No.	Frequency
1	429.0325MHZ	5	433.0325MHZ
2	430.0325MHZ	6	434.0325MHZ
3	431.0325MHZ	7	435.0325MHZ
4	432.0325MHZ	8	436.0325MHZ

Note: the frequency points corresponding to each channel can be adjusted based on the user's needs.

7. About antenna

KYL-300H radio modem is recommended to use with the following antenna. The gain is 5.5dBi. If you have any special needs about the antenna, please specify. You are welcomed to visit our web for more choice about the antenna: <http://www.rf-data.com/product2.asp?BigClassName=Antennas>. Moreover, we also provide OEM&ODM service.



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