LS-U1000D Wireless Transceiver Module

LS-U1000D is a low power wireless transceiver data module. With metal shell, DB9 Connector and good stability, reliability, it is widely used for kinds of outdoor wireless applications, such as remote control, industry automation, wireless telemetry and so on. This module can be connected with micro-controller, PC, RS485 equipments and other devices with UART port directly.

I. Technical specification

PERFORMANCE	
Power Output:	1W (@5V power supply)
RF Line-of-sight Range:	2000m@1200bps; 3000m@9600bps
RF Effective Rate:	1200/2400/4800/9600/19200bps
Space Channel:	1MHz(Default), (12.5/25KHz customization)
Bandwidth:	<25KHz
Receiver Sensitivity:	-123dBm@1200bps(1% BER)
NETWORKING	
Networking Topology:	Point-to-point, point-to-multipoint
COMPATIBILITY	

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KYL-200 and KYL-300 series	
POWER	
Supply Voltage:	5V DC (default), 3.3-3.6V(optional)
Transmit Current:	<450mA
Receive Current:	<28mA
GENERAL	
Communication Mode:	Half-duplex
Frequency Band:	433MHz default (400-470MHz selectable)
Channel:	8(default),16/32/64(optional)
Interface:	TTL, RS232, RS485
PHYSICAL PROPERTIES	
Size:	80㎜×45㎜×20㎜ (excluding antenna base and data pin)
Weight:	100g
Antenna Base:	50Ω, SMA
Operating Temperature:	Industrial:-40℃~+85℃(TCXO)
Frequency Stability:	±2.5ppm Industrial

II. Application Field

* AMR (Automatic Meter Reading)
* Wireless alarm and security systems
* Building automation, wireless monitoring, Access Control System;
* Wireless data transmission, automatic data collection system;
* Wireless POS, PDA wireless smart terminal;
* Wireless PTZ remote control, LED display;
* Industry automation, wireless telemetry, SCADA and so on.

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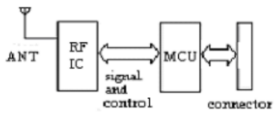
III. How to Use It

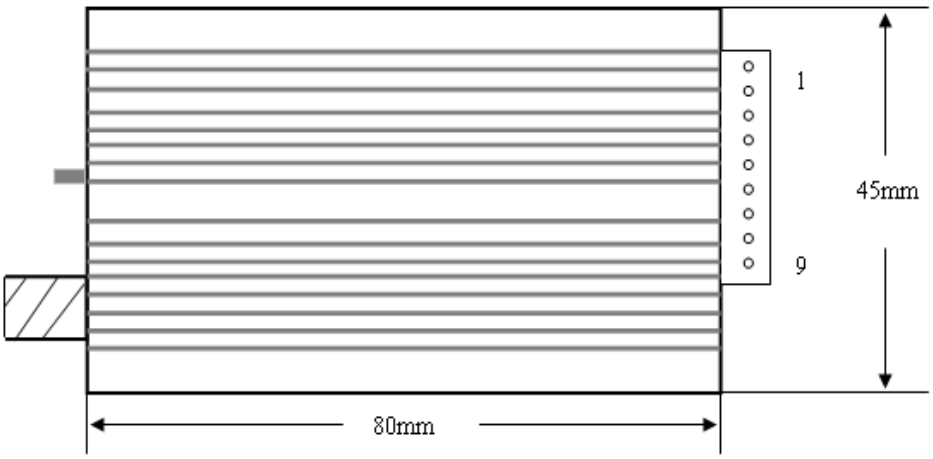


1. Default 5V Power supply
2. PIN Definition (9pin)

Table 1: JP1 Pin Definitions and connection methods

Pin No.	Signal Name	Function	Level	Connection with terminal	Remarks
1	VCC	Power supply DC	5V		
2					
3	A (TxD)	A of RS-485(TxD of RS-232)		A(RxD)	
4	B (RXD)	B of RS-485(RxD of RS-232)		B(TxD)	
5	GND	GND			
6					
7					
8					
9					

3. **Installation dimension:**



4. The Function-indicator light

a. The LED indicator blinks red and blue for 0.5S when power on.
b. The LED indicator blinks red continually when transmitting data.
c. The LED indicator blinks blue continually when receiving data.

5. Parameter setting by our software

You can use our software Lensen.exe to read or set the parameter on computer.

i. Channel configuration:

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

6. About antenna

We usually allocate LS-U1000D RF module with the following antenna. If you have any special needs about the antenna, please specify. You are welcomed to visit our web for more choice about the antenna: