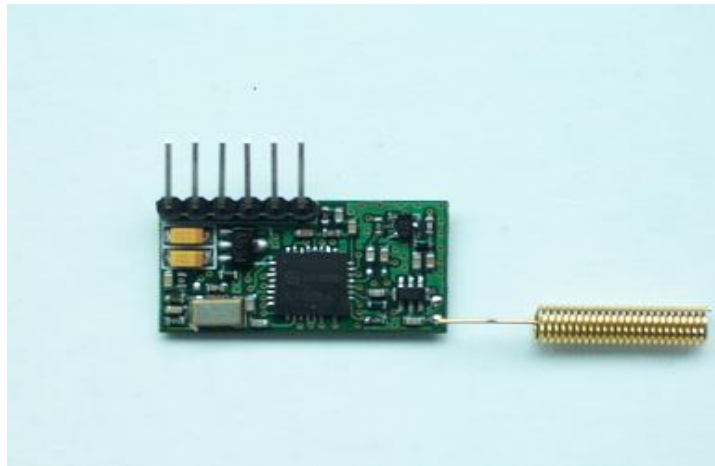


LS-S100 Mini-size Wireless Data Transceiver Module



LS-S100 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:	100mW(Default),
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	
LS-U Series	
POWER	
Supply Voltage:	5V DC (default),
Transmit Current:	100mA

Receive Current:	30mA
Sleep current:	10uA
GENERAL	
Communication Mode:	Half-duplex
Frequency Band:	433MHz (400/450MHz/470MHz)
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

LS-S100 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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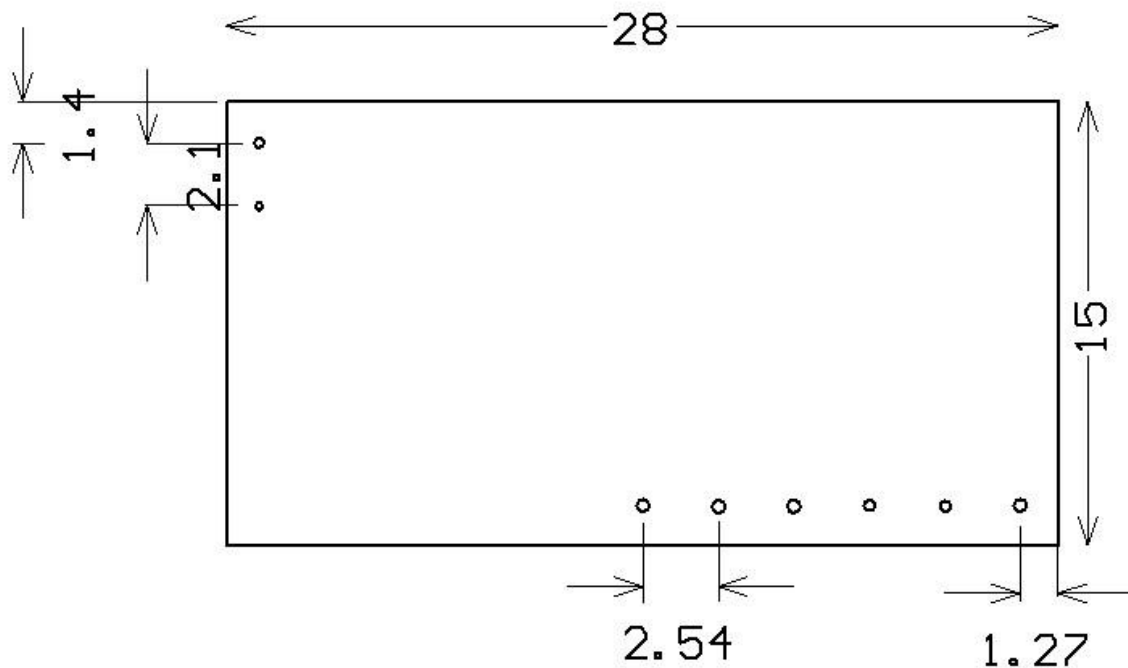
III. How to Use It

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

Table 1: JP1 Pin Definitions and connection methods

Pin No.	Signal Name	Function	Level	Connection with terminal	Remarks
1	GND	Grounding of power supply	-	Ground	
2	VCC	Power supply: DC 5V	-		
3	RXD/TTL	Data receiving	TTL	TxD	
4	TXD/TTL	Data transmitting	TTL	RxD	
5	SLP	Sleep control	-	Sleep signal	Low level valid
6	TEST	Factory testing	-	-	

3. Installation dimension



4. Parameter setting by our software

You can use our software Lensen.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

5. Standard package

- (a). One LS-S100 RF module
- (b). One 6-pin ribbon cable
- (c). One coil antenna

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