

利尔达科技集团股份有限公司

LIERDA SCIENCE & TECHNOLOGY GROUP CO., LTD

物联网无线收发器使用说明书

Operation Manual



产品名称: 大华 2.4G 语音通话 Dongle

产品型号: LSD4RF379-01D0

文档版本: V1.1

文档修改记录

项目名称	大华 2.4G 语音通话 Dongle	产品型号		LSD4RF379-01D0	
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1	初始版本	孙香涛		V1.0	2014-05-21
2	更改尺寸图, 部分 RF 参数	孙香涛		V1.1	2014-06-26



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Chap1: Characteristic

LSD4RF379-01D0 wireless module is designed for RF module integrated chip based on FRE006, is a high performance 2.4 networking wireless transceiver, and can be widely applied to various occasions of short distance wireless communication field of Internet of things. It has the characteristics of small volume, low power consumption, long transmission distance, strong anti-interference ability, module end with the USB interface, the interface is completely open to the outside, the customers can get rid of difficulties in the use of rf hardware design with more focus on the software and on the product structure, it can be applied directly to the product .

- working voltage: 5V;
- I/O electronic level 0 ~ 3.3V;
- Frequency: 2400~2483MHz;
- Transmission power: 3.0dBm±1dB;
- Accuracy: -83dBm (@2Mbps);
- GFSK、MSK modulation
- FRE006 chip embedded 8051core
- Low power consumption: emission current ≤40mA; receiving current≤25mA; sleeping current ≤1.5mA;
- Communication rate configurable, maximum to 2Mbps
- Good performance transmission quality, reliable distance to 12 m
- Compact design

LSD4RF379-01D0 wireless module can be applied to:

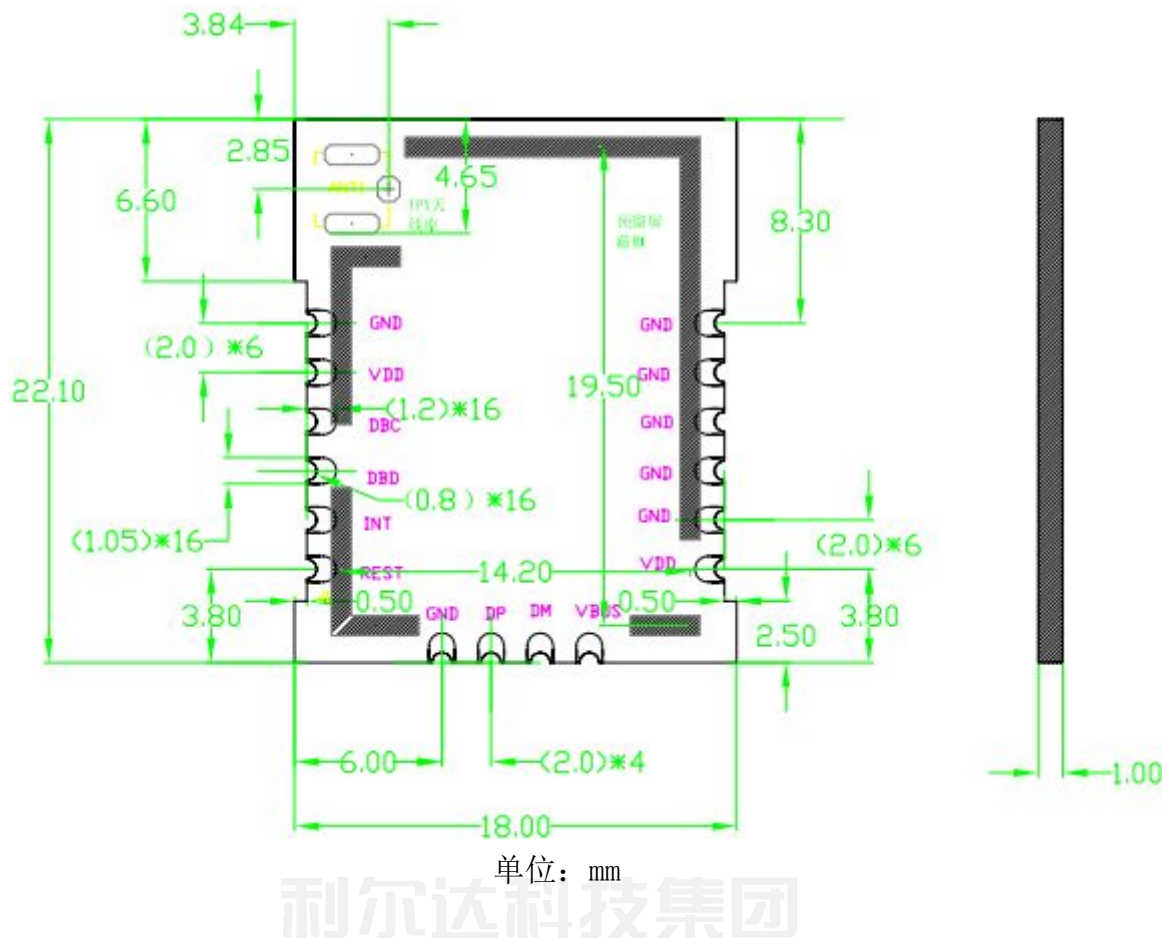
- Smart TV
- VOIP

Chap2: Parameters

Module Parameter:

Parameter	Performance		Remark
Voltage	5V		Low voltage caused communication error
Temperature	-20°C ~ 80°C		
Frequency	2400 ~ 2483 MHz		
Central frequency	2433MHz ± 30KHz		(Smart RF Software to calculate the value of the configuration register) Central frequency: 2433 MHz
Emission power	-20 ~ 3.5 ± 1dBm		Programmable
Transmission accuracy	-83 ± 1dBm		Central frequency: 2433 MHz Comm rate: 2 Mbps
Power consumption	Emission	≤40 mA	Max power output under 2433MHz Load standard 50 Ω
	Receiving	≤25 mA	
	Sleeping	≤1.5 mA	
Comm rate	Up to 2Mbps		Programmable
Modulation	GFSK、MSK		Programmable
Reliable transmission distance	>12m		Carrier: 2433MHz; View heigh: 2 meter
Electronic level	0 ~ 3.3V		
Connector type	2.0mm		SMD
Antenna type	IXP		
Dimension	Refer to chap 3		Millimeter, meetGB/T1804-C;

Chap3: Hardware layout



Chap 4 Annex

1、 The power supply voltage is 5V, recommend the use 5V DC regulated power supply, power supply ripple coefficient as low as possible, the module should be grounded reliably, and note the positive and negative electrode of power source connected properly, such as reverse connection may cause damage to the module

2、 Antenna module near no obstacles, otherwise it will seriously affect the communication quality

Warning:

1. Thanks for choosing Lierda products. Please read through this Manual before using the products. By using the products, you have understood and accept the terms and instructions in this Manual.
2. Wireless communicating module has some instability, there may lose frame or reframe, users can adopt some security arrangement to ensure the stability.
3. Lierda Science & Technology Group Co., LTD reserves all legal rights to revise and explain the terms and information provided, without prior notices.

Lierda WSN BU



FCC Compliance Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

3. (b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.