



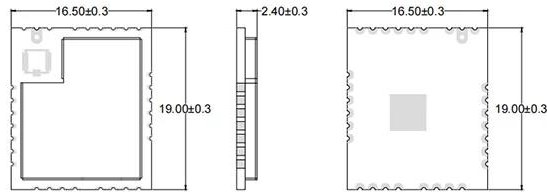


DX-LR01 Module

-  Uart Serial Communication
-  AT Command Set
-  Complete developer profile
-  ASR6601 SOC Chip
-  FCC/CE/ROHS Certification
-  Multiple external antennas available



LR01 Key Features



(Top and side view dimensions of the module)

Parameter	Details
Chip Model	ASR6601
Communication Interface	LPUART
AT instruction	Simple AT instruction set available, refer to datasheet for details
Communication Distance	Visible distance up to 8km in the open, 3.8km in the city
Frequency Band	433~475MHz
Transmission Method	Transparent transmission Fixed-point transmission Broadcast transmission
Operating Temperature	-40°C ~ +85°C
Firing Power	0~+22dBm
Operating Voltage	LR01: 3V ~ 3.7V (Typical 3.3V) LR01-A: 3V ~ 5.5V (Typical 5V)
Modulation Method	Spread Spectrum Modulation
Sensitivity	-138dBm
RF Input Impedance	50Ω

Drone measured communication distance

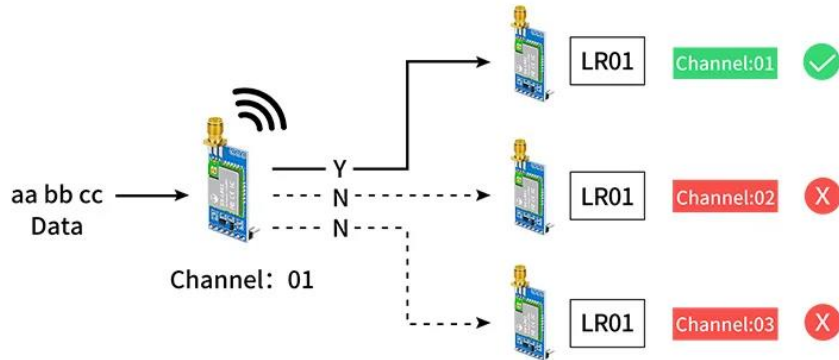
Visible distance up to 8km in the open,
3.8km in the city.



Support working mode

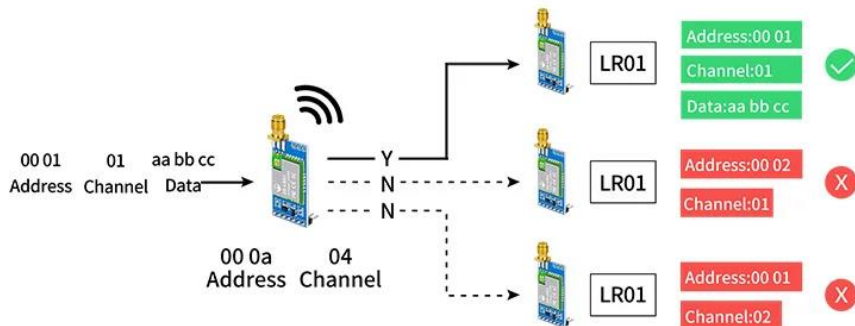
Module and module transparent transmission

This mode requires the same channel as the sender and receiver in order to send data.



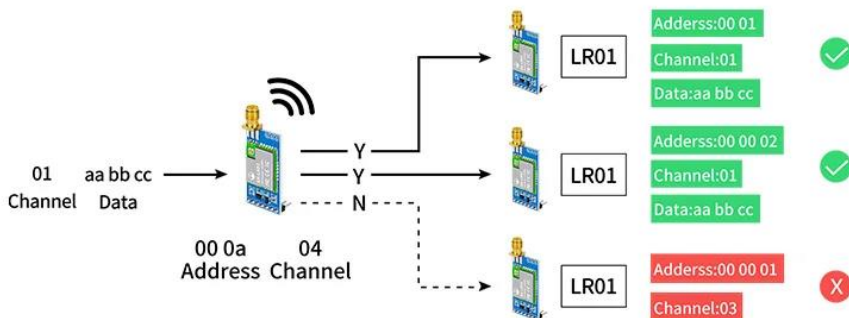
Module and module fixed-point transmission

Communicate with modules with specified addresses and channels
Data transmission format (hexadecimal):
receiving address+receiving channel+data

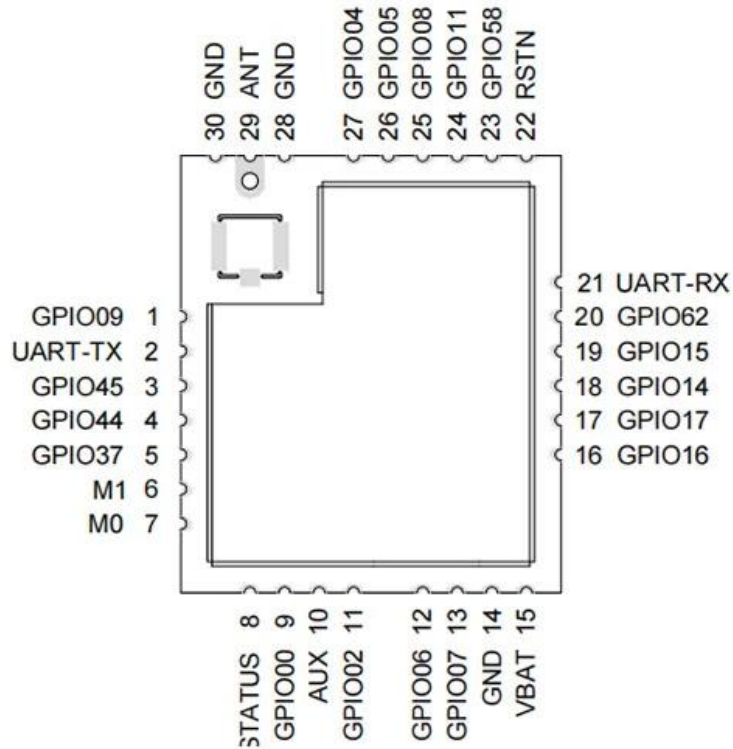


Modules and module broadcast transmission

Communicate with designated channel modules
Data transmission format (hexadecimal): receiver channel+data

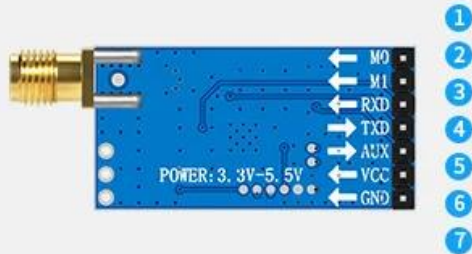


Module Pin Definitions



Pin number	Pin name	Pin function	illustrate
1,3,4,5,9,11,12,13,16,17,18,19,20,23,24,25,26,27	GPIO09、 GPIO45、 GPIO44、 GPIO37、 GPIO00、 GPIO02、 GPIO06、 GPIO07、 GPIO16、 GPIO17、 GPIO14、 GPIO15、 GPIO62、 GPIO58、 GPIO11、 GPIO08、 GPIO05、 GPIO04	IO	Programmable input/output pins
2	UART_TX	Serial data output	-
6	M1	Reserved	Customizable IO port
7	M0	Reserved	Customizable IO port
8	WORK-STATUS	Module working status output pin	1s high 1s low
10	AUX	Module RF status indication pin	For details, please refer to 2.3.4
14,28,30	GND	Power ground	-
15	VBAT	Power input pin	3.3V(typical value)
21	UART_RX	Serial data input	-
22	RSTN	Reset	For details, please refer to 2.3.3
29	ANT	Antenna	-

LR01 Backplane Pinout



- 1 MO
(reserved, customizable IO port)
- 2 M1
(reserved, customizable IO port)
- 3 UART_RX
- 4 UART_TX
- 5 AUX (Refer to 2.3.4 for details)
- 6 VCC-Power Supply 3.3V-5.5v
- 7 GND

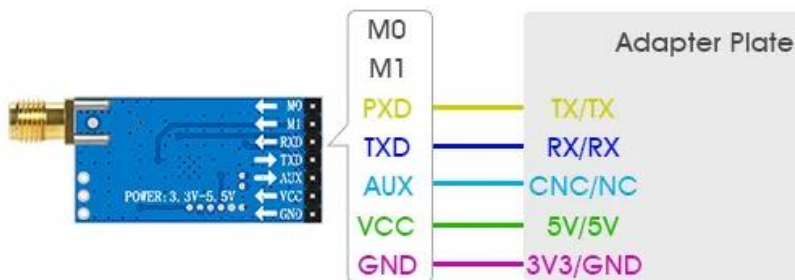
*Indicator status

Working status: Red light blinking

Hibernation mode: light off when hibernating,
red light flashing when waking up


LR01 & Adapter Board Wiring Diagrams

(Note: The module and the adapter board should be inserted with positive and negative pins.)



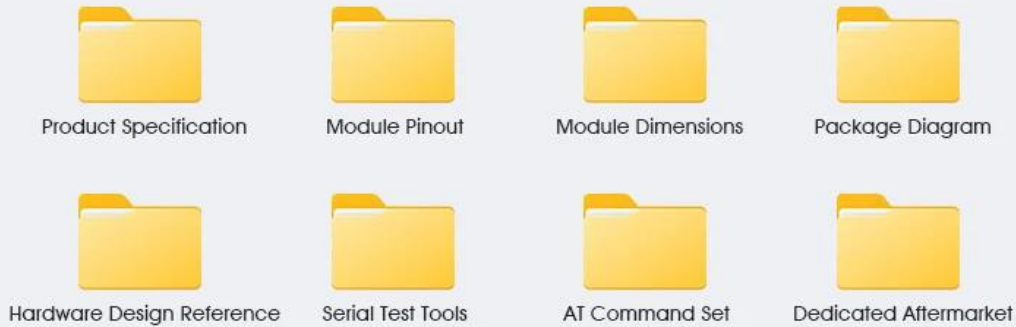
Example wiring diagram


AT command set

AT command	Command description
AT	Test (Response OK)
+++	Enter/exit AT command mode
AT+BAUD	Set/query baud rate
AT+MODE	Set/query operating mode
AT+SLEEP	Set/query power consumption mode
AT+CHANNEL	Set/query working channels
AT+MAC	Set/query device address
AT+POWE	Set/query transmit power
AT+IQ	Setting the Iq signal flip-flop
 For more AT commands, please consult the product information packages. ...	

Professional technical documentation

Professional documentation can help you use the module more easily and conveniently



 If you need more details, please feel free to contact us.

Meets global certification standards

