

## WH-L101-P datasheet

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### WH-L101-P

WH-L101-P is half-duplex LoRa module which supports point-to-point communication protocol. Transmitting side and receiving side must meet the following three conditions to realize point-to-point communication:

- Same speed level.
- Same channel.
- Same target address or both are broadcast address.

WH-L101-P supports following three work mode(Note: No matter which mode, one data package length can't over 252 bytes, otherwise data package will be discarded):

- AT command mode: In this mode, user can send AT commands to configure module.
- Transparent transmission mode: In this mode, data transmission procedure won't influence data content.
- Fixed point mode: In this mode, target address and channel can be changed to switch target module. Based on transparent transmission mode, first and second bytes of transmitted data will be target address and third byte will be channel. When module transmits data, target address and channel will be changed and settings will restore after transmitting.

There are two model number:

Product Model Number	Protocol	Frequency Band
WH-L101-L-P	Point to Point protocol	398Mhz~525Mhz
WH-L101-H-P		803Mhz~930Mhz

Basic parameters as follow table:

	Parameter	Range
Wireless parameter	Working frequency range	WH-L101-L-P: 398~525MHz WH-L101-H-P: 803Mhz~930Mhz
	Transmitting power	Working voltage range from 1.8V to 2.4V, transmitting power can be set between 10dBm~17dBm. Working voltage range from 2.4V to 3.6V, transmitting power can be set between 10dBm~20dBm.
	Receiving sensitivity	-138.5dBm@0.268Kbps
	Communication distance	3500m
	Antenna	Bonding pad
Hardware parameter	Data interface	1200bps~115200bps
	Working voltage	1.8V~3.6V
	Working current	@3.3V: Transmitting current 130mA; Receiving current 16mA; Wake up receiving current 4μA.
	Working temperature	-40°C~+85°C
	Storage temperature	-45°C~+90°C
	Working humidity	10~90%RH
	Storage humidity	10~90%RH
	Dimension	18.2mm*26.6mm*2.6mm
Encapsulation interface	SMT(surface-mount technology)	
	Certification	CE/RoHs

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