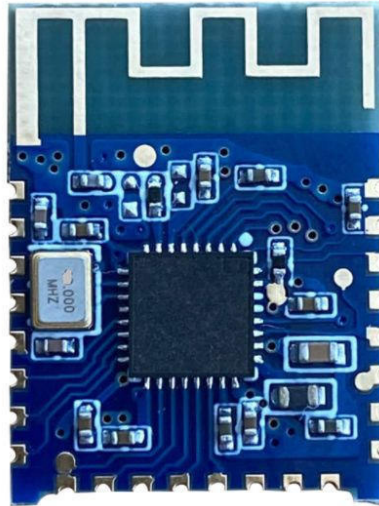


Super Bluetooth Module

JDY-25M Bluetooth Module Manual



JDY-25M **Super BLE** Bluetooth Module

Version

Version	Date	Description
V1.72	20200725	Release version

I . Product introduction

JDY-25M super Bluetooth function supports master-slave transparent transmission, iBeacon, BLE probe, iBeacon detection, and MESH network. The maximum number of MESH network supports 65280 device network. Multi-hop wireless anti-collision technology is adopted. The network communication speed supports 50ms to send 16 byte data. The single module supports routing node and terminal node. The routing node supports data relay (low power consumption is not supported). The terminal node supports low power consumption (automatic sleep after key wake-up and data sending), JDY-25M network generally only needs to be configured with network NETID and short address, and the module will automatically network. When the network module communicates with APP, it is equivalent to transparent transmission, which greatly convenient for users to develop APP compatible with old products APP.

II . Product characteristics

- 1: Support data transparent transmission with mobile phone (IOS, Android) APP (working current about 1mA)
- 2: Support module and module master slave high speed transparent transmission
- 3: Support iBeacon function (ultra-low power consumption)
- 4: Support iBeacon probe function
- 5: Support BLE Bluetooth probe function
- 6: Multi-connected slave mode is supported. Multi-connected slave can connect with multiple mobile phones and transparent transmission at the same time.
- 7: Support Bluetooth MESH network (Network serial port data communication, output IO control, input key control)
- 8: MESH network data sending supports response and no response communication
- 9: Network remote control
- 10: Multi-connected master-slave mixed connection (the master is connected to the slave at the same time, and the slave is connected to the mobile phone at the same time, and work at the same time)

III. Product application scope

- 1: Bluetooth network LED (one-to-many, many-to-one, mobile phone or remote controller control, many-to-many control)
- 2: Bluetooth network serial port communication application (one-to-many, many-to-one, mobile phone or remote controller control, many-to-many control)
- 3: Network panel switch, 86 switch (ultra-low power consumption)
- 4: Network smart home application (switch, relay, curtain) control
- 5: Network sensor application
- 6: WIFI network gateway application
- 7: Zigbee network application
- 8: Mobile network control application
- 9: Key label

IV. Technical specifications:

Type		Specification parameter
Working voltage		1.9 – 3.6V
Working temperature		-40 - 85°C
Maximum transmitting power		+4dbm
Communication distance		80m
Bluetooth version		BLE5.0
Antenna		PCB board antenna
Antenna gain		-3dbi
Receiving sensitivity		-96dbm
SMT welding temperature		<260°C
Communication interface		UART
Module size		27mm * 12.88 * 1.6
Communication speed between slave and APP		8k(byte/s)
MESH communication speed		50ms send 16byte
Average current	Wake up (transparent transmission) current in non MESH mode	About 1mA
	Light sleep of slave with broadcast in non MESH mode	Within 200uA (related to broadcasting interval)
	Wake up communication current in MESH mode	About 4mA
	Sleep current in MESH mode	3uA
	Deep Sleep Mode	3uA