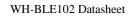


WH-BLE102 Datasheet

File Version: V1.0.0.01





1.Product overview

WH-BLE102 is low-power BLE module which supports BLE 4.2 protocol and user can realize communication through simple configuration. User can set two modules as one master with one slave to transmit data and develop APP according to standard BLE protocol to connect module and communicate. BLE102 supports one-to-many broadcast mode and iBeacon protocol. And module also supports modifying 128bit format UUID to be compatible with other company BLE modules. In a word, WH-BLE102 is reliable BLE module with various functions and high compatibility.

2.Product features

- Support standard BLE 4.2 protocol
- Support low power consumption broadcast mode with average current 800uA and hibernate mode with average current 500nA. Support various waking up ways
- Support fast switch between master mode and slave mode
- Support serial AT command mode and transparent transmission AT command mode
- Support one-to-many broadcast mode and iBeacon protocol
- Support mesh networking mode
- Support modifying 128bit format UUID

3.Product specifications

Wireless parameter		
Wireless standard	802.15.1	
Frequency range	2.402GHz~2.480GHz	
Transmitting power	-14dBm~+8dBm	
Receiving sensitivity	-85dBm	
Antenna	Internally installed antenna: On-board antenna	
	Externally installed antenna: I-PEX connector	
Transmission distance	Module to module: 100m.(Open area with maximum transmitting power)	
	Mobile phone to module: 140m.(Open area with maximum transmitting power)	
Hardware parameter		
Working voltage	1.7V~3.6V	
Working current	Average 2.40mA@3.3V, slave mode without entering sleep mode	
	Average 4.50mA@3.3V, master mode without entering sleep mode	
	Average 2.40mA@3.3V, broadcast mode without entering sleep mode	
	Average 0.800mA@3.3V, slave mode with entering deep sleep mode	
	Average 0.800mA@3.3V, broadcast mode with entering deep sleep mode	
Dimensions	18.2×26.7×3(mm)(L*W*H)	
Working environment		
Working temperature	-40~85℃	
Storage temperature	-40~125℃	
Serial port		
Serial port number	TTL*1	
Standard	3.3V-TTL	

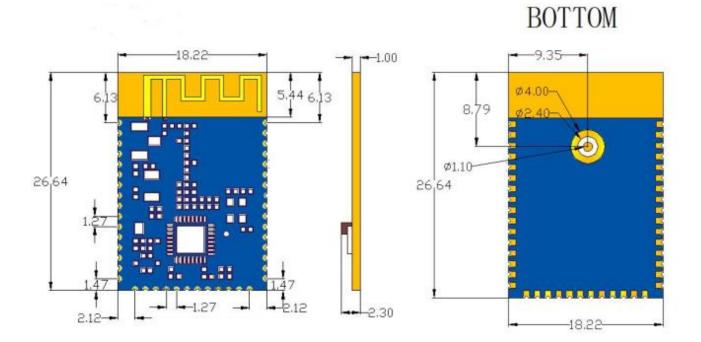
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Data bits	5, 6, 7, 8	
Stop bits	1, 1.5, 2	
Parity	None, Even, Odd	
Baud rate	1200bps~ 921600bps	
Cache	512 bytes	
Flow control	Don't support	
Software parameter		
Device type	Master device/Slave device	
Security mechanism	128-bit AES engine	
Encryption type	PC1 encryption	
Work mode	Master mode, slave mode, broadcast mode, mesh networking mode	
Configuration command	AT command mode	
Configuration method	Serial AT command mode, transparent transmission AT command mo	de

4.Product dimensions

Unit: mm





5.Contact Us

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6.Disclaimer

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7.Update History

2018-01-04 V1.0.0.01 established.