

Bluetooth LE Gateway User Manual

Model: JW1602G4V6

V1.0.2

(Last Modified on 2026-4-23 by Bob Xia)

Model	Description
JW1602G4V6	Bluetooth LE Gateway, 4G LTE network, IP55 waterproof, 220V AC powered, Upload data to server, MQTT, Black color. Led lights.

NOTE: Supported countries are listed in the end of this file.

The Bluetooth LE Gateway JW1602G4V6 is a Bluetooth® Low Energy gateway device, it is designed to scan nearby bluetooth advertising package, can be used for asset tracking, people tracking, pet tracking, sensor data collecting, SOS button signal collecting, etc.

FEATURES

- Standard firmware with open communication protocol.
- -91 dBm sensitivity for BLE.
- Peak current 500mA.
- Idle current 25mA.
- Easy to print the logo



SPECIFICATION

Compatibility

- (1) Compatible with all Bluetooth® 4.0 and above BLE advertising devices.

Power supply

- (1) AC: 100~250V 50/60Hz

Soft Reboot

- (1) Connect gateway by app 'Joyway Beacon' then disconnect to make it reboot.

Soft Reboot, OTA and J-Link

- (1) Support soft reboot;
- (2) Support DFU/OTA;
- (3) Reserved J-Link/SWD port on the board for programming;

Interface

- (1) Led 1: GPS status
- (2) Led 2: 4G network status
- (3) Led 3: Bluetooth status

Configurable Parameters

- (1) Device password
- (2) Server IP/URL, server port
- (3) Network protocol MQTT/TCP/UDP
- (4) MQTT parameters
- (5) Scan filters

Transmission Power Levels

- (1) -20, -16, -12, -8, -4, 0, +4 dBm.

Security

- (1) Need password to connect and configure
- (2) AES HW encryption

Install

- (1) Indoor/Outdoor.

Working Mode

- (1) Always scan nearby ble advertising package and report to server by 4G network.
- (2) Does not scan while connected by tool app 'Joyway Beacon'.

ACTIVATE JW1602G4V6

It start working immediatly when connected power source.

CONFIGURE PARAMETERS

Use Android app to configure gateway.

App name: Joyway Beacon


Download link: http://www.joyway.cn/download/android_app/JoywayBeacon.apk

16:08 184 KB/s HD HD 59%

1 devices Scan clear DFU

Name: No adv name

Rssi: -60 dBm

 JW1602G4V6
C4:62:56:11:F9:4D
BLE gateway with 4G network.

CONNECT -74 dBm 4483 ms

16:07 0.37 KB/s HD HD 59%

JW1602G4V6 Save

C4:62:56:11:F9:4D
Firmware publish ID: 38000
Connected

Device password: Show password

Server IP/URL:

Server port:

Protocol type: MQTT ▼

MQTT User Name:

MQTT User Password:

MQTT QoS: 1 ▼

MQTT Keep Alive Time(seconds):

Scan Filter - RSSI(dBm):

Scan Filter - MAC:
(Input MAC format, XX means any hex value.)

Scan Filter - RAW DATA:
Expected values (e.g., 'FF:A4:C3' or 'FFA4C3'):

Value start position (e.g. '0' means the expected values start at the first byte in scanned raw data):

COMMUNICATION PROTOCOL

MQTT			
ID	Topic	Msg Data	Description
1	SE/Gateway Mac/Beacon Mac	Raw adv data	Gateway report scanned advertisement raw data to server.

ELECTRONIC PARAMETERS

Item	Value	Remarks
Case Color	Black	
Power supply	AC: 100~250V, 50/60Hz	
Operation Voltage	5V	DC
Transmission Current	500mA(Max.)	Test at 0dBm transmission power
BLE transmission Range	50 meters	Maximum
Antenna	50ohm	
Net Weight	65 g	
Size	45.5x29x70 mm	Power cable length not included.

PACKING INFORMATION

Details	Small Box	Carton
Quantity(JW1602G4V6)	1 pc	100 pcs
Net Weight	65 g	6.5 kg
Gross Weight	80 g	8 kg
Size	50x34x74 mm	270x190x316mm

SUPPORTED COUNTRIES

Level	Region	Country/Territory	Remarks (Reason)
✓ Safe to Use	Asia	Mainland China	Fully supports China Mobile, China Unicom, China Telecom 4G bands
✓ Safe to Use	Asia	India	4G bands similar to China; theoretically supported. Field test recommended before shipment due to multiple operators
✓ Safe to Use	Asia	Indonesia	Mainly uses B1/B3/B5/B8/B40 – all within Air780EQ support range
✓ Safe to Use	Asia	Philippines	Globe and Smart mainly use B1/B3/B5/B40/B41 – good compatibility

✓ Safe to Use	Asia	Cambodia	Major operators use B1/B3/B5/B8 – almost perfect match
✓ Safe to Use	Asia	Laos	Band requirements mainly B1/B3/B8/B40 – high overlap with supported bands
✓ Safe to Use	Asia	Myanmar	Operators Telenor, MPT mainly use B1/B3/B8/B40/B41
✓ Safe to Use	Asia	Vietnam	Viettel, Vinaphone mainly use B1/B3/B8/B40
✓ Safe to Use	Asia	Bangladesh	Mainstream bands B1/B3/B5/B8 – compatible with Air780EQ
✓ Safe to Use	Asia	Pakistan	Mainly uses B1/B3/B5/B8 – good support
✓ Safe to Use	Asia	Sri Lanka	Major operators use B1/B3/B5/B8/B40
✓ Safe to Use	Asia	Nepal	Mainly uses B1/B3/B5/B8 – high compatibility
✓ Safe to Use	Asia	Hong Kong (China)	Operators generally support B1/B3/B5/B8/B40 – good compatibility
✓ Safe to Use	Asia	Macau (China)	Band usage similar to Mainland China – good support
✓ Safe to Use	Asia	Taiwan (China)	Chunghwa, FarEasTone mainly use B1/B3/B7/B8/B28/B38; B7/B28 not supported, but B1/B3/B8/B38 provide partial coverage – field test recommended
✓ Safe to Use	Africa	South Africa	Major operators use B1/B3/B5/B8/B38/B40 – high compatibility
✓ Safe to Use	Africa	Nigeria	Mainstream bands B1/B3/B5/B8/B40 – good support
✓ Safe to Use	Africa	Kenya	Mainly uses B1/B3/B5/B8/B40
✓ Safe to Use	Africa	Egypt	Mainstream bands B1/B3/B5/B8/B40
✓ Safe to Use	Africa	Ghana	Mainly uses B1/B3/B5/B8
✓ Safe to Use	Africa	Morocco	Mainstream bands B1/B3/B5/B8
✓ Safe to Use	Africa	Angola	Mainly uses B1/B3/B5/B8/B40
✓ Safe to Use	Africa	Ethiopia	Mainstream bands B1/B3/B5/B8/B40
✓ Safe to Use	Africa	Tanzania	Mainly uses B1/B3/B5/B8
✓ Safe to Use	Africa	Uganda	Mainstream bands B1/B3/B5/B8
✓ Safe to Use	Asia	Uzbekistan	Mainly uses B1/B3/B5/B8/B40
✓ Safe to Use	Asia	Kazakhstan	Mainstream bands B1/B3/B5/B8/B40
Marginally Usable	Asia	Thailand	AIS/TrueMove use B1/B3/B8/B40 (supported), but dtac heavily uses B28 (unsupported); some base stations have B7
Marginally Usable	Asia	Malaysia	CelcomDigi and Maxis core bands B3/B8 (supported), but heavily deploy B7 as capacity layer – B7 absence causes limited speed/coverage

Marginally Usable	Asia	Singapore	Singtel, StarHub, M1 use B3 and B7 as dual main bands – B7 has high share; lack of B7 leads to incomplete coverage
Marginally Usable	Asia	Timor-Leste	Operator band info unclear; mainstream devices use B3/B8, but B7/B28 deployment unknown – field test required
Marginally Usable	Asia	Israel	Mainly uses B1/B3/B5/B8/B28 – B28 not supported; B1/B3/B5/B8 provide partial coverage
Marginally Usable	Asia	Saudi Arabia	Mainstream bands B1/B3/B5/B8/B20/B28/B40 – B20/B28 not supported
Marginally Usable	Asia	UAE	Mainly uses B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported
Marginally Usable	Asia	Qatar	Mainstream bands B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported
Marginally Usable	Asia	Kuwait	Mainly uses B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported
Marginally Usable	Asia	Oman	Mainstream bands B1/B3/B5/B7/B8/B20 – B7/B20 not supported
Marginally Usable	Asia	Bahrain	Mainly uses B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported
Marginally Usable	Asia	Jordan	Mainstream bands B1/B3/B5/B7/B8/B20 – B7/B20 not supported
Marginally Usable	Africa	Algeria	Mainly uses B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported
Marginally Usable	Africa	Tunisia	Mainstream bands B1/B3/B5/B7/B8/B20 – B7/B20 not supported
Marginally Usable	Africa	Libya	Limited band info; known to use B1/B3/B5/B7/B8/B20/B28 – high risk of incompatibility
Marginally Usable	Africa	Sudan	Mainstream bands B1/B3/B5/B7/B8/B20 – B7/B20 not supported
Marginally Usable	Africa	Zimbabwe	Mainly uses B1/B3/B5/B7/B8/B20/B28 – high risk of incompatibility
Marginally Usable	Africa	Mozambique	Mainstream bands B1/B3/B5/B7/B8/B20/B28 – high risk of incompatibility
Marginally Usable	Europe	Russia	Mainly uses B1/B3/B5/B7/B8/B20/B28/B38/B40 – B7/B20/B28 not supported; only B1/B3/B5/B8/B38/B40 cover partial areas
Marginally Usable	Europe	Turkey	Mainstream bands B1/B3/B5/B7/B8/B20/B28/B40 – B7/B20/B28 not supported
Marginally Usable	Europe	Ukraine	Mainly uses B1/B3/B5/B7/B8/B20 – B7/B20 not supported

Marginally Usable	Europe	Belarus	Mainstream bands B1/B3/B5/B7/B8/B20 – B7/B20 not supported
Marginally Usable	Asia	Mongolia	Mainly uses B1/B3/B5/B7/B8/B20/B28 – B7/B20/B28 not supported

DECLARATION

The contents of this datasheet are subject to change without prior notice for further improvement. Joyway team reserves the right to explain all the terms of this datasheet.

CONTACT US

Shenzhen Joyway Technologies Co., Ltd.

Technical Support:

Email: bob@joyway.cn

<https://www.joyway.cn>