



Wireless Bluetooth Gateway Datasheet
TYGWBS-02N

Contents

1 Introduction	1
2 Features	1
3 Application Ideas	2
4 Mechanical Specification	2
5 Electrical Specification	3

1 Introduction

Wireless Bluetooth Gateway TYGWBS-02N is a ultra low cost Bluetooth gateway that supports Wi-Fi, Mesh, single-point, Beacon and Beacon Mesh communication. By connecting to the gateway you enable communication with the cloud and the app, allowing users to easily view and control up to 128 smart devices for each gateway that use the Bluetooth protocol.

2 Features

- **Max Connectivity:** Support Max 128 SigMesh devices, or 64 Beacon devices, or 64 Beacon Mesh devices, or real-time control of 2 single point devices, the max connectivity enriches smart home application scenarios.
- **Automatic Association:** When you add new Mesh/Beacon Mesh devices through cellphone Bluetooth, they will be automatic association with gateway and realize remote control function.
- **One-Key Pairing:** Short press the button on the gateway to enter the long-term pairing mode (the indicator light will flash), and last for 1 hour. At this point, if the sub-devices are in pairing mode, the sub-devices will be added automatically. It supports multiple devices to be added at the same time. You can press the button once again to turn off the one-key pairing mode.
- **Remote Control:** Users can use APP/Voice (Alexa, Google Home...) control Mesh and single point devices through the gateway.
- **Cloud scene/automation:** Through the scene and automation settings in the APP, the Bluetooth sub-device under the gateway can link with other smart devices(such as Wi-Fi plug).
- **Local scene/automation:** The gateway prioritizes local scene/automation instead of Cloud scene/automation, which reduces the cloud delay. The local scene/automation responses quickly even when the external network is

Wireless Bluetooth Gateway Datasheet

disconnected.

- **Long/Short Connections:** The gateway supports single point devices long connections and on-demand connections to sub-devices to meet the power consumption requirements of different application scenarios.
- **OTA:** Not only support gateway firmware OTA, but also support SigMesh, single point and Beacon Mesh sub-device firmware OTA through the gateway.
- **Signal Strength Detection:** The gateway can detect the Wi-Fi signal strength between router & gateway and Bluetooth signal strength between sub-devices & gateway as well. It helps end user diagnose the connectivity issue quickly.
- **One-Click Migration:** When the original gateway fails and the new gateway is replaced, the original scene and linkage can be seamlessly migrated without reconfiguration through the migration function.

3 Application Ideas

- Ambiance(Lighting)
- Energy(Thermostat, Socket, Temperature/humidity sensor)
- Outdoor(Lighting, Water timer)
- Home appliances(Curtain, Door Lock, Finger Robot)

4 Mechanical Specification

- **Gateway Dimensions**

61.8×62×15.3 mm

2.43×2.44×0.6 inch

Wireless Bluetooth Gateway Datasheet



- **Gateway Weight**

34 g

0.07 lb

- **Gateway Color**

White

- **Gateway Material**

PC+ABS

5 Electrical Specification

- **CR3L**

Wi-Fi and Bluetooth combo, Wi-Fi only support 2.4GHz, NOT support 5GHz

Item	Parameters
Chip	W701M-VT2-CG
Standard	IEEE 802.11 B/G/N20
Band	2.400 to 2.4835 GHz
Bluetooth version	Bluetooth 4.2
Maximum output power	20dBm
Data transmission rate	11g: 6, 9, 12, 18, 24, 36, 48, 54 (Mbps) 11n: HT20 MCS 0 to 7
Channels	1~14

Wireless Bluetooth Gateway Datasheet

Antenna type	PCB antenna with a gain of 1.88 dBi
Wi-Fi Range	Up to 650ft outdoors Up to 200m outdoors
Bluetooth Range	Up to 320ft outdoors Up to 100m outdoors

- **Peripheral Interface**

1 Micro USB, 1 Button and 2 Indicators on the top.

- **Power Adapter**

Input: 100 - 240VAC 50/60 Hz

Output: 5V 1A

- **Temperature Requirements**

Operational temperature: -10°C~+45°C / 14°F~+113°C

Storage temperature: -20°C~+60°C / -4°F~+140°F

- **Humidity Requirements**

Operational humidity: 10%-90%RH (non-condensing)

Storage humidity: 5%-90%RH (non-condensing)

- **Certifications**

CE/FCC/ROHS/REACH

- **Warranty**

1 year limited hardware warranty