A181G001

Bluetooth Mesh Gateway

A181G001 is a Bluetooth mesh gateway. As the core device of the Bluetooth mesh network, it acts as the hub for all other Bluetooth devices within the mesh network. The gateway connects to the cloud platform through Wi-Fi, ethernet or 4G network, to allow communication between the sensors and the cloud platform. The status information of the sensors can be viewed on the platform.

Features

Gateway Feature

The gateway supports the Bluetooth mesh protocol, and Bluetooth sub-devices such as occupancy sensor, counting sensor, ceiling mounted occupancy sensor. Allowing all devices to connect and transfer information securely to the cloud platform.

Real-time Data Reporting and Offline Caching

The A181G001 uploads data to the cloud platform with a delay of less than 100ms. When the gateway is offline, the data will be cached locally and transmitted after the network connection is restored.

Datasheet

Host Module Specifications

Chip	BCM2837
Processor Speed	1.0GHz
Chip architecture	ARMv8
Operating system	Linux 4.14
Flash	4GB
DDR	1GB
WLAN	NA

Bluetooth Mesh

Chip	nRF52832 QFAA
Standard	IEEE 802.15.4
Frequency range	2.4～2.485GHz
Maximum output power	19dBm
Dynamic output power	>35dB
Transmission range	>200m
Maximum number of connections	1400
Receiver performance	-102dBm sensitivity PER<10%
Network topology	Star/Tree/Mesh network
Antenna	Built-in antenna
Firmware update	OTA

Electrical Specifications

Adapter	12V/1A DC or PoE
Operating voltage	1.8～3.3V

Environment Requirements

Operating temperature	-10-55℃
Operating humidity	10%-90%RH(no condensation)
Storage temperature	-20-60℃
Storage humidity	5%-90%RH(no condensation)

Physical Specifications

Dimensions	120 x 120 x 29mm
Weight	166g
Casing	ABS plastic

Indicator Lights

First from the left	Processor status indicator light
Second from the left	Power status indicator light
Second from the right	Wi-Fi status indicator light
First from the right	Bluetooth status indicator light

Status

Processor working	Indicator light flashing
Processor not working	Indicator light always on
Power working	Indicator light always on
Power not working	Indicator light always off
Wi-Fi working	Indicator light flashing
Wi-Fi not working	Indicator light always off
Bluetooth working	Indicator light always on
Bluetooth not working	Indicator light always off

Package Includes

Gateway x1
RJ45 Ethernet cable x1
Power cable x1
Adapter x1

* The above data is measured by 9am laboratory, and may be affected by environmental factors.

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NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are
designed to provide reasonable protection against harmful interference in a
residential installation. This equipment generates uses and can radiate radio
frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Warning Statements:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.