LG1

LoRaWAN Gateway

Datasheet

LoRaWAN®

PRODUCT OVERVIEW

The LG1 is an IoT gateway based on low-power, wide-area network technology using the standard LoRaWAN® protocol. The product offers excellent signal coverage and superior signal penetration capabilities, providing convenient LoRaWAN® network signal coverage and a solution for bidirectional data transmission in IoT applications.

The gateway features a high-performance transceiver chip from Semtech, capable of simultaneously receiving 8 channels of LoRa wireless signals. It transmits wireless data transparently to an external LoRaWAN® NS（Network Server） via Ethernet/WiFi/4G or can be configured to use an embedded NS to interface directly with customer application platforms. This gateway is widely used in various communities, parks, buildings, and other scenarios, providing safe and stable LoRaWAN® network coverage and services.

KEY FEATURES

Standard LoRaWAN® protocol	High capacity	Embedded LoRaWAN® NS	Interface richness
Rich network transmission methods	Easy maintenance	Kensington safety lock slot	

MARKET APPLICATIONS

The LG1 offers a flexible, easy-to-install, and cost-effective solution for a wide range of IoT applications, providing high-reliability connectivity in both indoor and combined indoor-outdoor scenarios.

Such as, Intelligent Buildings, Smart Firefighting, Smart Home, Indoor Parking, Smart Warehousing, Smart Metering, Smart Cities, Smart Transportation, Smart Communities, Industrial Parks,etc.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

Option	Description
Casing Material	Aluminum alloy + PC
Color	Gray (Black or white can be customized)
Power Supply	DC12V~1A
Operating Temperature	-10℃ ~ 50℃
Overall Power Consumption	~7W
Dimensions	180mm * 115mm * 30mm (excluding antenna)
Port	10/100M base-T adaptive Ethernet interface(RJ45*2) USB2.0 (Store data or extend LET on network card) SIM card port TF card port Reset port Kensington anti-theft lock slot

LORAWAN® PARAMETERS

Option	Description
Operating Frequency	Available Frequencies:EU863-870 / US902-928 / AS923 / AU915-928 / KR920-923, etc.
Communication Rate	292bps~5.4kbps, supports spreading factor SF7~SF12
Receiver Sensitivity	-141dBm @ SF12
Transmit Power	Max.25dBm (adjustable)
Channels	8 uplink channels, 1 downlink channel
Protocol Support	LoRaWAN® V1.1 and backward compatibility with V1.0.X, supports Class A/C terminals
Device Types Support	Class A, Class C
Antenna	External omnidirectional antenna

ETHERNET PARAMETERS

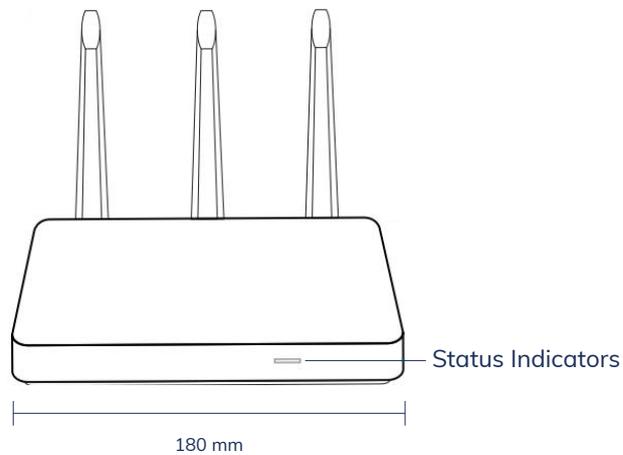| Option	Description
Number of Ports	1 * WAN port, 1 * LAN port, 10/100M
WAN Port Protocol Support	Static, DHCP Client, PPPOE
LAN Port Support	IPv6 intermediate router function

WIFI PARAMETERS

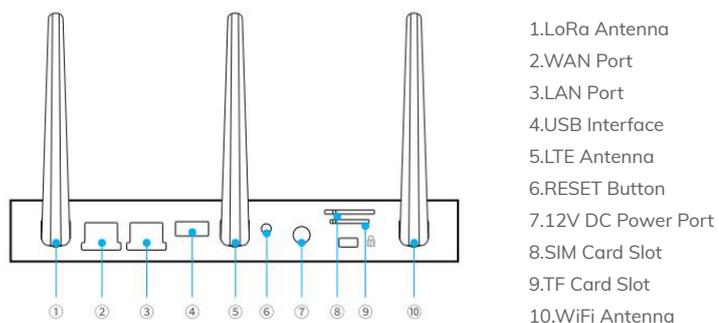| Option	Description
Frequency and Mode	2.4GHz, supports STA+AP mode
Protocol Standard and Encryption	802.11bgn, WPA2 PSK encryption
Transmit Power	Maximum power 18dBm
Antenna	External omnidirectional antenna

LTE PARAMETERS (OPTIONAL)

Option	Description
LTE Standard	Supports global frequencies for China/Europe/North America, full-netcom 3G/4G
SIM Card	1 slot
Antenna	External omnidirectional antenna

PRODUCT INTERFACE DESCRIPTION

Status Indicators

180 mm

Front Panel Description

1.LoRa Antenna
2.WAN Port
3.LAN Port
4.USB Interface
5.LTE Antenna
6.RESET Button
7.12V DC Power Port
8.SIM Card Slot
9.TF Card Slot
10.WiFi Antenna

Bottom Panel Description

INDICATOR LIGHT DESCRIPTION

INDICATOR LIGHT / INDICATOR LIGHT STATUS	GREEN LIGHT FLASHING	GREEN LIGHT ON	RED LIGHT ON	YELLOW LIGHT ON	LIGHT OFF
WAN Port Indicator	Network data transmission	No data interaction	/	/	Network cable not connected
LAN Port Indicator	Network data transmission	No data interaction	/	/	Network cable not connected
LoRa Status Indicator	LoRa running or initialization	Gateway operating normally	LoRa not running	Server no ACK response	Power off or gateway starting up

PRECAUTIONS

* Before installing this product, you need to first install a LoRaWAN network server that supports GWMP, or use a server based on the Basics™ Station LNS protocol, or use the gateway's built-in NS (which only supports a small number of LoRaWAN end devices). The verification of the online status of this product depends on whether the established network is functioning normally.

* Unauthorized modification of the device or its provided accessories may damage the device and void the warranty.

* When installing the gateway, avoid large metal objects that may block the signal and affect performance.

* Do not install the gateway near power transmission lines, especially high-voltage power lines.

* During installation, ensure the gateway is away from areas with high current and frequent current changes. Also, ensure there are no metal objects within 3 meters of the gateway.

* Minew reserves the right to final interpretation.

QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (tests include transmission power, sensitivity, power consumption, stability, aging, etc.).

Warranty Period: 12 months from the date of shipping (battery and other accessories excluded).

DECLARATION

Statement of Rights:

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