UG63

LoRaWAN® Gateway

Milesight

UG63 is a 8-channel lightweight indoor LoRaWAN® gateway. Adopting, SX1302 chip and high-performance CPU, UG63 can not only set up packet forwarding connection between more than 2000 end nodes and mainstream network servers (such as TTN, Chirpstack, etc.), but also cover up to 2 km in urbanized environment as a blind-filling gateway. With compact size, it is an ideal supplement for UG65 or UG67 for blind-filling in complex environment or wide indoor areas such as office, parking lots, campuses, etc.

Besides, UG63 also has built-in network server and is compatible with Milesight IoT for dealing with data for a few end-nodes, suitable for LoRaWAN® small deployments.

◆ Application Example
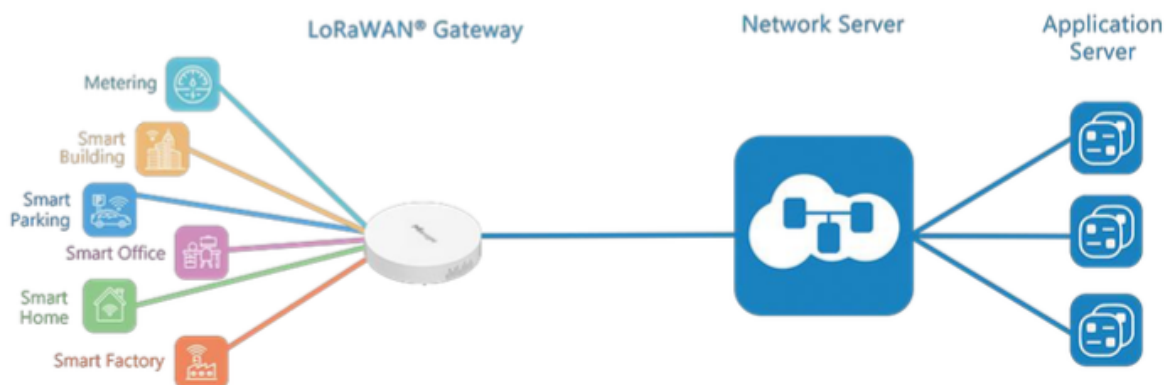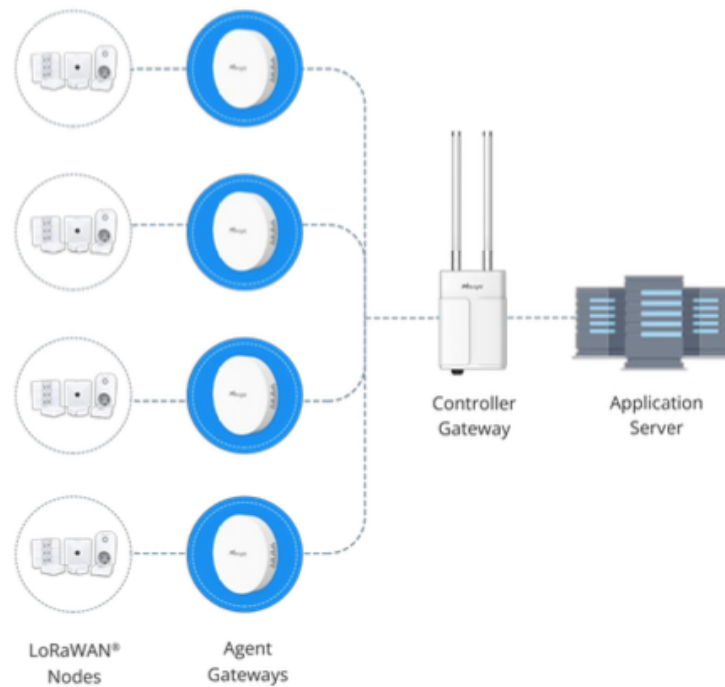
*Note: This shows the blind-filling function among Milesight gateways.

◆ Features

- High Performance NXP industrial processor and SX1302 chip
- 8 half/full-duplex channels
- Support Listen Before Talk (LBT) for downlink
- Small in size for easy carrying & deployment
- Desktop, wall or ceiling mounting support
- Cover the blind spot of LoRaWAN® network by transmitting data to Milesight UG56/UG65/UG67 controller gateway
- Milesight DeviceHub & IoT Cloud provide easy and centralized management of remote devices
- Enable security communication with multiple VPNs like IPsec/OpenVPN/L2TP/PPTP/DMVPN
- Compatible with mainstream network servers like The Things Industries, ChirpStack, etc.
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Support 20-50 end nodes with embedded NS for small deployment

◆ Specifications

Hardware System	
CPU	528 MHz, ARM Cortex-A7
Memory	256 MB DDR4 RAM
Flash	4 GB eMMC

LoRaWAN

Antenna	2 × Internal Antennas
Channel	8 (Half/Full-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Sensitivity	-140dBm Sensitivity @292bps
Output Power	27dBm Max
Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
LBT	Support

Ethernet Interface

Port	1 × RJ45 (PoE PD supported)
Physical Layer	10/100 Base-T (IEEE 802.3)
Data Rate	10/100 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)

Others

Reset Button	1 × RST
Console Port	1 × Type-C
LED Indicators	1 × SYS, 1 × LoRa
Built-in	Watchdog, RTC, Timer

Software

Network Protocols	PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SSH, MQTT, etc.
VPN Tunnel	OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN
Management	Web, CLI, DeviceHub, Milesight IoT Cloud

Power Supply and Consumption

Power Input	1. 1 × 802.3af standard PoE input 2. 5V by Type-C Port
Power Consumption	Max 3.3 W

Physical Characteristics

Ingress Protection	IP30
Dimensions	Φ 115 x 21 mm (Φ 4.52 x 0.83 in)
Color & Material	White, PC + ABS
Installation	Desktop, Wall or Ceiling Mounting

Environmental

Operating	-20°C to +50°C (-4℉ to +122℉)

Temperature	
Storage Temperature	-40°C to +85°C (-40℉ to +185℉)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77℉
Approvals	
Regulatory	CE, FCC
Environmental	RoHS

◆ Dimensions (mm)
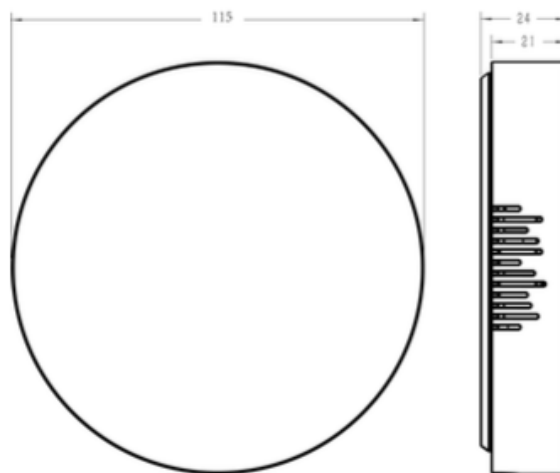
◆ Accessories

2 × Wall Mounting
Kits

1 ×Type-C Cable &
Power Adapter
(Optional)

*Note: Contact us if you need any other special accessories or customized accessories.