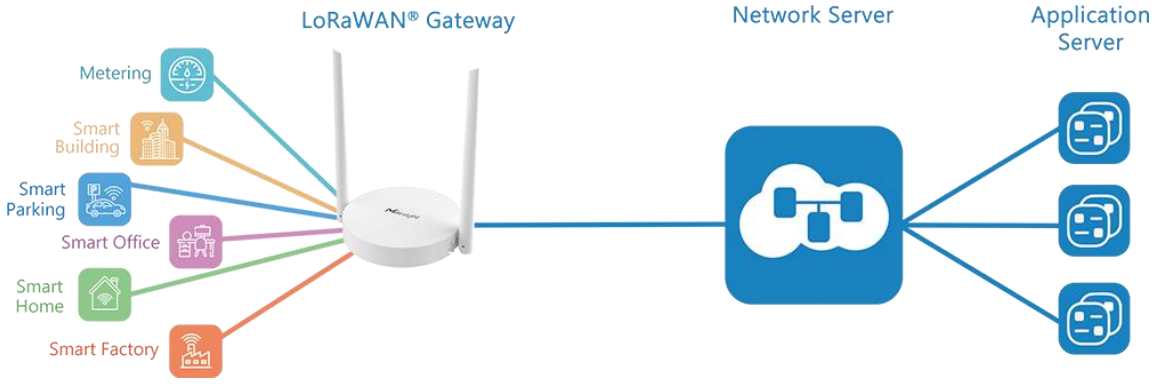
Mini LoRaWAN® Gateway

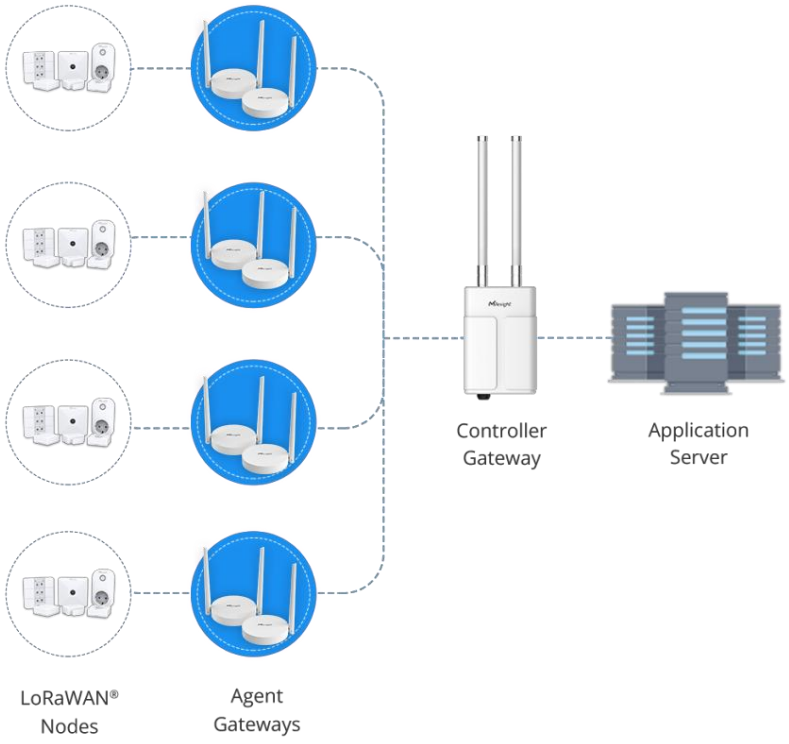
UG63



UG63 is a 8-channel lightweight indoor LoRaWAN® gateway. Adopting, SX1302 chip, UG63 can set up packet forwarding connection between end nodes and mainstream network servers (such as TTN, Chirpstack, etc.). With its compact size and high performance, it is highly suitable for independent deployment of LoRaWAN® networks in small-scale scenarios or single spaces. It can also serve as a supplementary gateway, along with UG65/UG67 or other main gateways, to enhance LoRaWAN® signal coverage in large-scale scenarios by filling in signal blind spots. it is an ideal supplement for wide indoor areas such as office, parking lots, campuses, etc.

◆ Application Example





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

◆ Features

- Equip with SX1302 chip, handing a higher amount of traffic with lower consumption
- 8 half-duplex channels for more than 2000 end-nodes connections
- Small in size for easy carrying & deployment
- Desktop, wall or ceiling mounting support
- Multi backhaul backups with Ethernet and Cellular (4G)
- Cover the blind spot of LoRaWAN® network by transmitting data to Milesight UG56/UG65/UG 67 controller gateway
- High cost performance, suitable for small applications
- Milesight DeviceHub2.0 & IoT Developer Platform provide easy and centralized management of remote devices
- Compatible with mainstream network servers like The Things Industries, ChirpStack, AWS IoT Core for LoRaWAN® and etc.

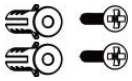
◆ Specifications

Hardware System	
CPU	Dual-core 240MHz, 32-bit Xtensa® LX7
Memory	8 MB PSRAM

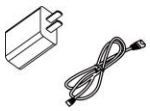
Flash	16 MB Flash
LoRaWAN®	
Antenna Connector	1 × External Antenna
Channel	8 (Half-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Sensitivity	-140dBm Sensitivity @292bps
Output Power	27dBm Max
Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
Cellular Interface (Optional)	
Network	4G LTE (CAT 1)/GSM
Antenna	1 x External Antenna
Cellular Band	**L08GL (Global except North America):** LTE-FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66 LTE-TDD: B34/38/39/40/41; GSM: B2/3/5/8 **L09NA (North America):** LTE-FDD: B2/4/5/12/13/66
SIM Slots	1 (Micro SIM-3FF)
Ethernet Interface	
Port	1 × RJ45 WAN Port
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)
Wi-Fi	
Standards	IEEE 802.11b/g/n, 2.4 GHz
Mode	AP Mode (Device Configuration Only)
Others	
Button	1 × Reset Button
Console Port	1 × USB 2.0 (Type-C) for Power Supply and Console
LED Indicators	1 × SYSTEM, 1 x LTE
Built-in	Watchdog, Timer
Power Supply and Consumption	
Power Input	1. 5V by Type-C Port 2. 5~12V DC by 3.5mm 2-pin Terminal Block

	3. 802.3af standard PoE input by (Optional) PoE Splitter
Power Consumption	Typical 1.3W, Max 3.1 W
Physical Characteristics	
Ingress Protection	IP30
Dimensions	Φ 115 x 21 mm (Φ 4.52 x 0.83 in) (Antenna Excluded)
Color & Material	White, PC + ABS
Installation	Desktop, Wall or Ceiling Mounting
Environmental	
Operating Temperature	-20°C to +50°C (-4℉ to +122℉)
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

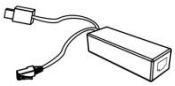
◆ Accessories



2 × Wall Mounting Kits



1 ×Type-C Cable & Power Adapter**



1 x PoE Splitter**

Note:

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

**One of the Type-C Cable&Power Adapter and PoE Splitter can be provided as standard accessories, while the other can be offered as an optional accessory.