

# UG63

## LoRaWAN<sup>®</sup> Gateway

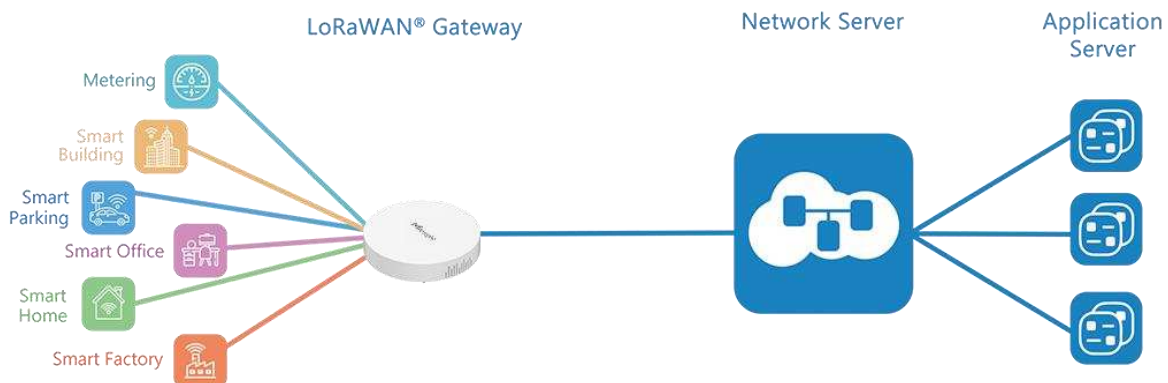
# Milesight



UG63 is a 8-channel lightweight indoor LoRaWAN<sup>®</sup> gateway. Adopting SX1302 LoRa chip and high-performance CPU, UG63 supports connection with more than 2000 nodes and can cover 15 km in sight and about 2 km in urbanized environment. With compact size, it is ideally suited for offices, parking lots, campuses, hotels, exhibition centers and many other indoor areas. It also applies to provide coverage for indoor blind spots.

UG63 has both integrated mainstream network servers (such as TTN, ChirpStack, etc.), and built-in network server, and it is compatible with Milesight IoT Cloud for easy deployment.

### ◆ Application Example



## ◆ Features

- High performance NXP industrial processor with big memory
- Equip with SX1302 chip, handling a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- Support worldwide LoRaWAN<sup>®</sup> frequency range from 470 MHz to 928 MHz
- Support Listen Before Talk (LBT) for downlink
- Desktop, wall or ceiling mounting support
- DeviceHub and Milesight 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.
- Detect and analyze the noise level and provide intuitive diagram for deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration

## ◆ 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
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Console Port	1 × Type-C
LED Indicators	1 × SYS, 1 × LoRa
Built-in	Watchdog, RTC, Timer
<b>Software</b>	
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
<b>Power Supply</b>	
Power Input	1. 1 × 802.3af standard PoE input 2. 5V by Type-C Port
<b>Physical Characteristics</b>	
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
<b>Environmental</b>	
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F