

UG67

LoRaWAN® Gateway

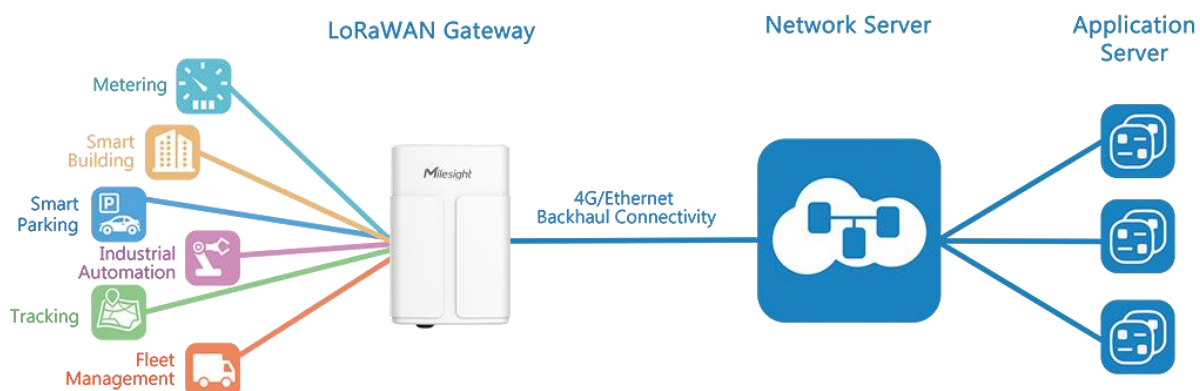
Milesight



UG67 is a robust 8-channel outdoor LoRaWAN® gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, UG67 supports connection with more than 2000 nodes. UG67 has line of sight up to 15 km and IP67 waterproof case, which is ideally suited to smart agriculture, smart metering and many other outdoor applications.

UG67 supports not only multiple back-haul backups with Ethernet, Wi-Fi and cellular, but also has integrated mainstream network servers (such as TTI, ChirpStack, etc.) and built-in network server and Milesight IoT Cloud for easy deployment.

◆ Application Example



◆ Features

- Quad-core industrial processor with big memory
- Equip with SX1302 chip, handing a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- IP67 waterproof enclosure and industrial design for harsh environment applications
- Wall or pole mounting (optional)
- PoE or solar power supply (optional)
- Capacitor for sending alarms in case of power failure
- Multi backhaul backups with Ethernet, cellular (4G/3G) and Wi-Fi
- Enable security communication with multiple VPNs like IPsec/OpenVPN/L2TP/PPTP/DMVPN
- Devicehub and Milesight IoT Cloud provide easy and centralized management of remote devices
- Compatible with mainstream network servers like The Things Industries, ChirpStack, Actility, Everynet, 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
- Support BACnet/IP to integrate LoRaWAN data to BMS system easily
- Embedded Python SDK for users secondary development
- Fast and user-friendly programming by Node-RED development tool

◆ Specifications

Hardware System

CPU	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
Memory	512 MB DDR4 RAM
Flash	8 GB eMMC

LoRaWAN®

Antenna Connector	2 × 50 Ω N-Female External Connectors
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 ¹	Support

Ethernet Interface

Port	1 × RJ45 (PoE PD supported)
------	-----------------------------

¹ AU915 and US915 do not support LBT.

Physical Layer	10/100/1000 Base-T (IEEE 802.3)
Data Rate	10/100/1000 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)

Wi-Fi Interface

Antenna	Internal Antenna
Standards	IEEE 802.11 b/g/n, 2.4GHz
Mode	AP or Client mode
Security	WPA/WPA2 authentication, WEP/TKIP/AES encryption
Tx Power	802.11b: 18 dBm +/-2.0 dBm (11 Mbps)
	802.11g: 15 dBm +/-2.0 dBm (6 Mbps)
	802.11g: 15 dBm +/-2.0 dBm (54 Mbps)
	802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS0_HT20)
	802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS7_HT20)
	802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS0_HT40)
	802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS7_HT40)

Cellular Interface (Optional)

Antenna	Internal Antenna
SIM Slot	1 (mini SIM-2FF)

GPS

Antenna	Internal Antenna
Sensitivity	-167dBm@Tracking, -149dBm@Acquisition, -161dBm@Re-acquisition
Position Accuracy	<2.5m CEP

Others

Reset Button	1 × RST
Console Port	1 × Type-C
LED Indicators	1 × SYS, 1 × LoRa, 1 × LTE
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, BACnet/IP, etc.
VPN Tunnel	OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN
Firewall	ACL/DMZ/Port Mapping/MAC Binding/URL Filter
Management	Web, CLI, SMS, On-demand dial up, DeviceHub, Milesight IoT Cloud, Yeastar Workplace Platform

Reliability WAN Failover

App Python SDK, Node-RED

Power Supply and Consumption

Power Input

1. 1 × 802.3 af PoE input
2. 12 VDC with M12 Connector

Power Consumption Typical 3.6 W, Max 4.8 W

Physical Characteristics

Ingress Protection IP67

Dimensions 240 x 164 x 90.9 mm (9.45 x 6.46 x 3.58 in)

Installation Wall or Pole Mounting

Environmental

Operating -40°C to +70°C (-40°F to +158°F)

Temperature Reduced Cellular Performance Above 60°C

Storage Temperature -40°C to +85°C (-40°F to +185°F)

Ethernet Isolation 1.5 kV RMS

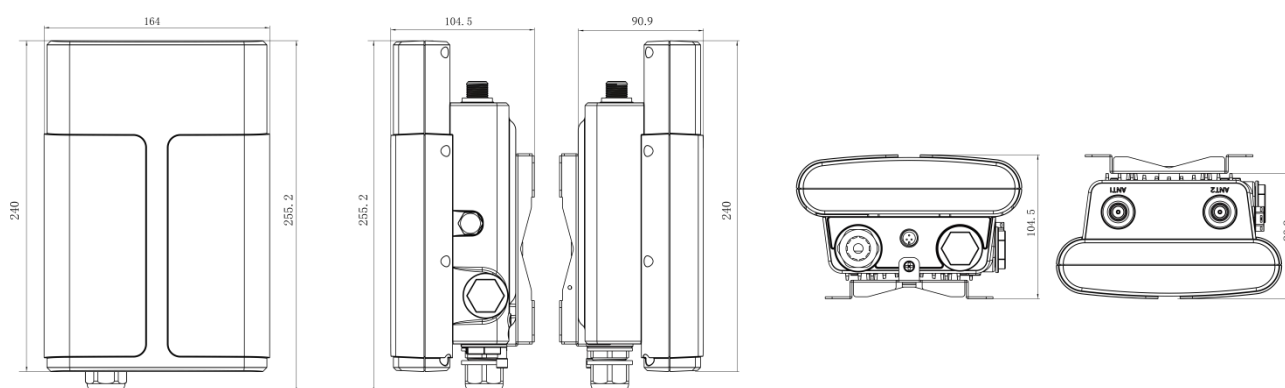
Relative Humidity 0% to 95% (non-condensing) at 25°C/77°F

Approvals

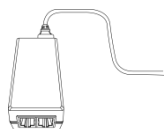
Regulatory CE, FCC, RCM,TELEC, ANATEL

Environmental RoHS

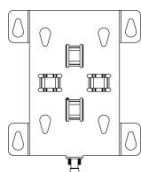
◆ Dimensions(mm)



◆ Accessories



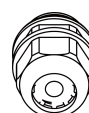
1 × PoE Injector



1 × Mounting Bracket



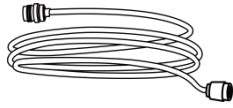
4 × Wall Mounting Kits



1 × RJ45 Cable Gland



1 × SIM Dust Cover



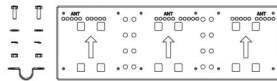
1 × Antenna Coaxial
Cable (1m)



1 × M12 DC Power
Cable



2 × 60cm LoRaWAN®
Antennas



1 × Short Mounting
Backboard Kit

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



WELKO Av. Providencia 2330, Of. 63
+56 9 3174 3870 / +56 9 3427 0017
ventas@welko.cl - www.welko.cl

