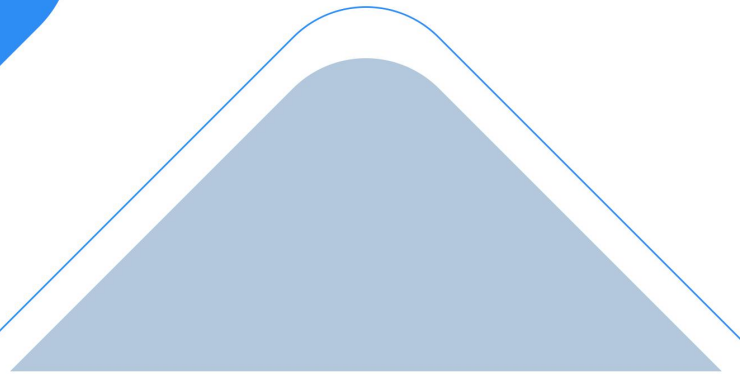


# UG67

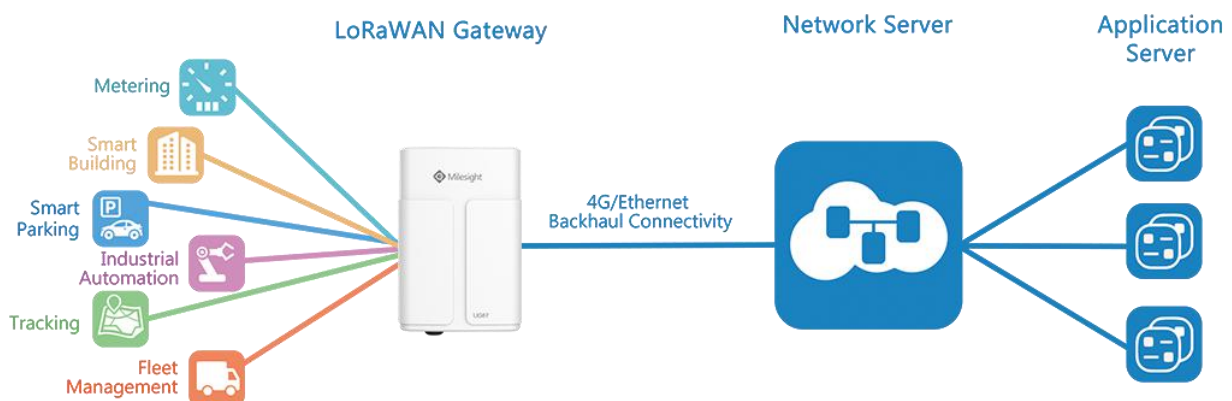
## LoRaWAN<sup>®</sup> Gateway



UG67 is a robust 8-channel outdoor LoRaWAN<sup>®</sup> 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 15km 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 TTN, ChirpStack, etc.) and built-in network server and Milesight IoT Cloud for easy deployment.

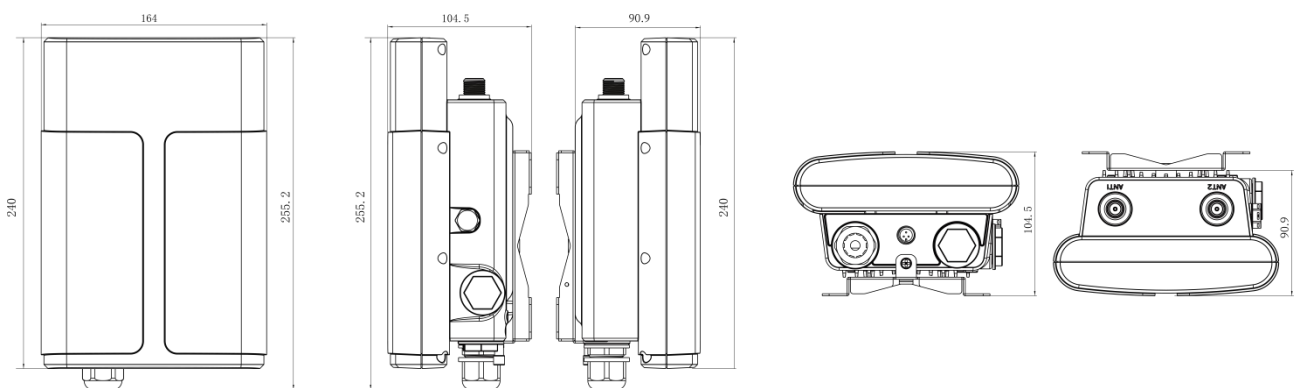
### ◆ Application Example



## ◆ 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
- 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 TTN, ChirpStack, etc.
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Embedded Python SDK for users secondary development

## ◆ Dimensions(mm)



## ◆ 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	2 × Internal Antennas + 2 × 50 Ω N-Female External Connectors
Channel	8 (Half/Full-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923
Sensitivity	-140dBm Sensitivity @292bps

Output Power	27dBm Max
Protocol	V1.0 Class A/Class C and V1.0.2 Class A/Class C

### Ethernet Interface

Port	1 × RJ45 (PoE PD supported)
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, etc.
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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
Reliability	WAN Failover

### Power Supply and Consumption

Power Input	<ol style="list-style-type: none"> <li>1 × 802.3 af PoE input</li> <li>12 VDC with M12 Connector</li> </ol>
Power Consumption	Typical 3.6 W, Max 4.8 W

### Physical Characteristics

Ingress Protection	IP67
Dimensions	250 x 172 x 92 mm (9.84 x 6.77 x 3.62 in)
Installation	Wall or Pole Mounting

### Environmental

Operating Temperature	-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

