

KUG67

LoRaWAN Gateway

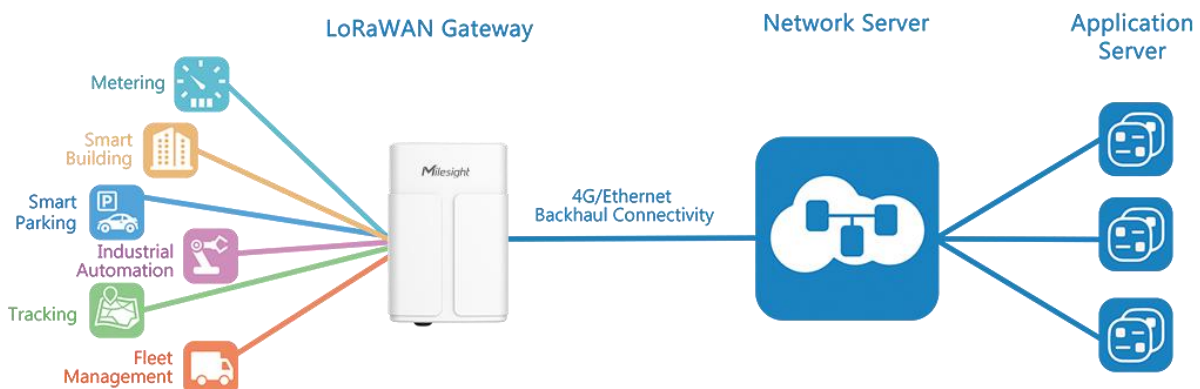
Outdoor Gateway



KUG67 is a robust 8-channel outdoor LoRaWAN[®] gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, KUG67 supports connection with more than 2000 nodes. KUG67 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.

KUG67 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, handling 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 KLED 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, 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
- 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	2 × Internal Antennas + 2 × 50 Ω N-Female External Connectors
Channel	8 (Half/Full-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&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

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)
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Wi-Fi Interface

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

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

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

Reset Button	1 × RST
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Console Port	1 × Type-C
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LED Indicators	1 × SYS, 1 × LoRa, 1 × LTE
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Built-in	Watchdog, RTC, Timer
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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
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Firewall	ACL/DMZ/Port Mapping/MAC Binding/URL Filter
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Management	Web, CLI, SMS, On-demand dial up, DeviceHub, KLED IoT Cloud, Yeastar Workplace Platform
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Reliability	WAN Failover
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App	Python SDK, Node-RED
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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
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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

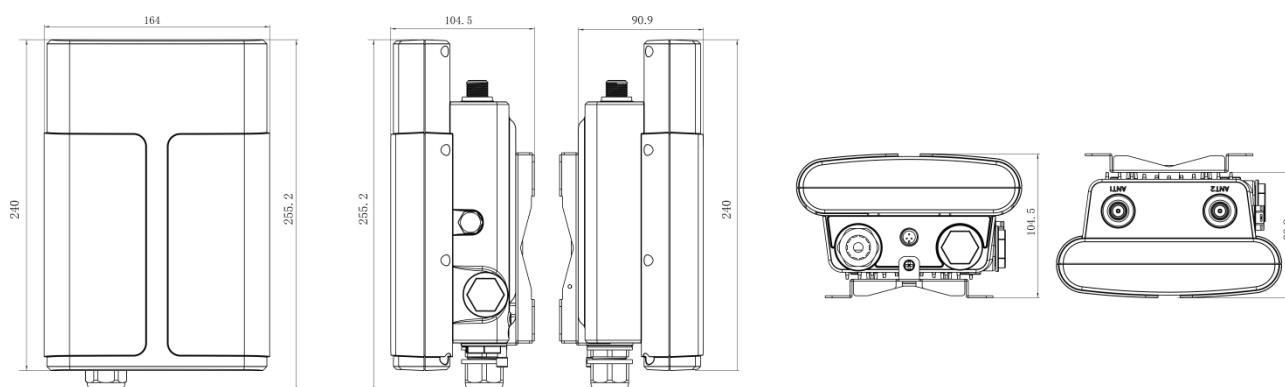
Environmental

Operating 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

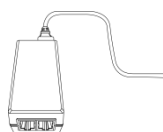
Approvals

Regulatory	CE, FCC, RCM,TELEC, ANATEL
Environmental	RoHS

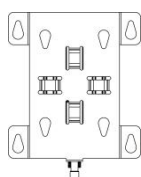
◆ Dimensions(mm)



◆ Accessories



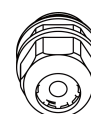
1 × PoE Injector



1 × Mounting Bracket



4 × Wall Mounting Kits



1 × RJ45 Cable Gland



1 × SIM Dust Cover



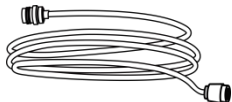
2 × Hose Clamps



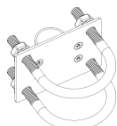
1 × M12 DC Power
Cable



2 × 60cm LoRaWAN[®]
Antennas



1 × Antenna Coaxial
Cable (1m)



1 × Antenna Clamp Kit

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