

Ursalink UG65 LoRaWAN Gateway



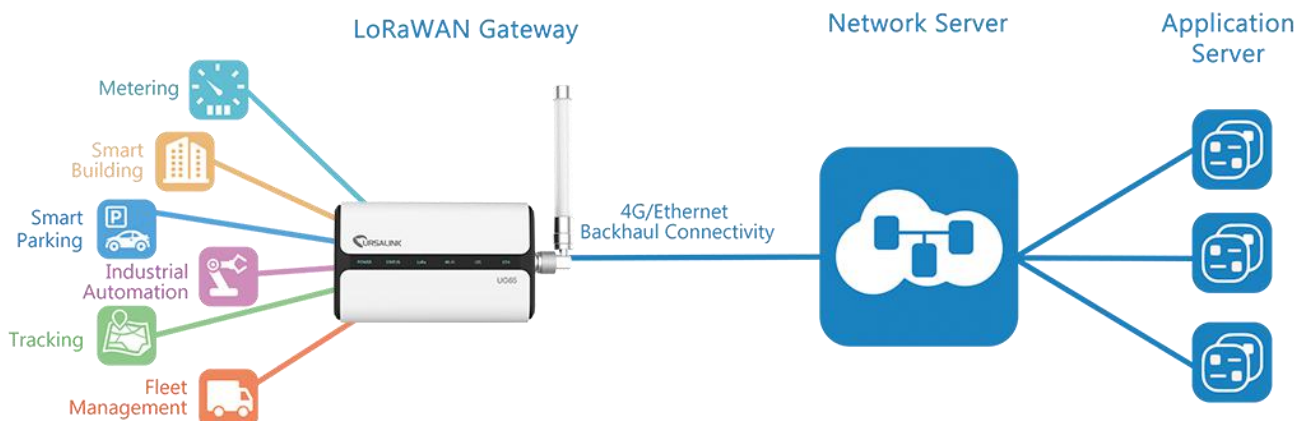
Indoor Cost-effective Gateway
for the Internet of Things

► Introduction

Ursalink UG65 is an affordable 8-channel indoor LoRaWAN gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, UG65 supports connection with more than 2000 nodes. UG65 has line of sight up to 10km and can cover about 2km in urbanized environment, which is ideally suited to smart office, smart building and many other indoor applications.

UG65 supports not only multiple back-haul backups with Ethernet, Wi-Fi and cellular and has integrated mainstream LoRa network servers (such as TTN, ChirpStack, etc.), but also built-in network server and Ursalink Cloud for easy deployment.

► Application Example

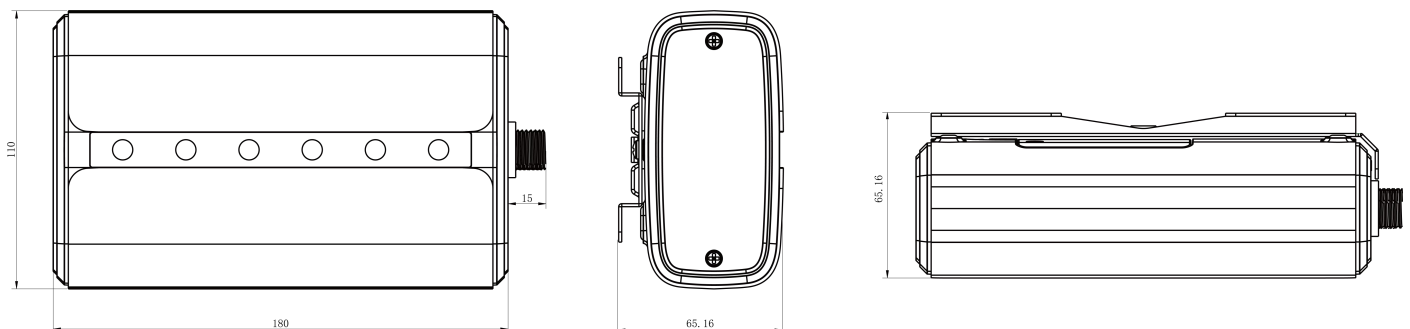


► Specifications

Model	UG65
Hardware System	
CPU	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
Memory	512 MB DDR4 RAM
Flash	8 GB eMMC
LoRaWAN	
Antenna	Fully Integrated and Internal Antenna (Optional: 1 × 50 Ω N-Female External Connector)
Channel	8
Frequency Band	EU433/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 support)
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	
Antenna	Fully Integrated and Internal Antenna
Standards	IEEE 802.11 b/g/n
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	Fully Integrated and Internal Antenna
SIM Slot	1
Software	
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
Access Authentication	CHAP/PAP/MS-CHAP/MS-CHAPV2
Firewall	ACL/DMZ/Port Mapping/MAC Binding/URL Filter
Management	Web, CLI, SMS, On-demand dial up, DeviceHub, Ursalink Cloud
Reliability	WAN Failover
Power Supply and Consumption	
Power Supply	1. DC Jack Connector for 9-24 VDC power supply 2. 1 × 802.3 af PoE input
Consumption	≤ 4.2W
Physical Characteristics	
Ingress Protection	IP65
Dimensions	180 x 110 x 56.5 mm
Mounting	Desktop, Wall or Pole Mounting
Others	
Reset Button	1 × RST
Console Port	1 × Type-C Port
LED Indicators	1 × POWER, 1 × STATUS, 1 × LoRa, 1 × Wi-Fi, 1 × LTE, 1 × ETH
Built-in	Watchdog, RTC, Timer
Certification	CE, FCC
Environmental	
Operating Temperature	-40°C to +70°C (-40°F to +158°F) 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

▶ Product Images/Dimensions (mm)



► Ordering Information

Model	UG65
Air Interface	LTE(LTE-FDD/LTE-TDD)/CDMA(CDMA 1x/EVDO)/TD-SDMA/DC-HSPA+/HSPA+ /HSUPA/HSDPA/WCDMA/EDGE/GPRS/GSM
4G	-E: B1/B3/B5/B7/B8/B20@FDD LTE, B38/B40/B41@TDD LTE -AF: B2/B4/B5/B12/B13/B14/B66/B71@FDD LTE -AU: B1/B2/B3/B4/B5/B7/B8/B28@FDD LTE, B40@TDD LTE -J: B1/B3/B8/B18/B19/B26 @FDD LTE, B41@TDD LTE -CE: B1/B3/B8@FDD LTE, B38/B39/B40/B41@TDD LTE
3G	-E: B1/B5/B8@WCDMA -AF: B2/B4/B5@WCDMA -AU: B1/B2/B5/B8 WCDMA -J: B1/B6/B8/B19@WCDMA -CE: B1/B8@WCDMA, B34/B39@TD-SCDMA, BC0@CDMA2000 1x/EVDO
2G	-E: 900/1800@GSM -AU: 850/900/1800/1900@GSM -CE: 900/1800@GSM

*: Any other frequency band requirements please contact us.

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