

UG65

LoRaWAN[®] Gateway

UG65 is a robust indoor LoRaWAN[®] gateway that connects Yeostar Smart Sensors (Occupancy Sensor and People Counting Sensor) to Yeostar Workplace. Adopting SX1302 LoRa chip and high-performance quad-core CPU, UG65 supports a clear line of sight up to 15 km and can cover about 10000 to 15000 ft² in office applications.

- Quad-core industrial processor with big memory
- IP65 enclosure and industrial design for parts of outdoor environment applications
- Desktop, wall or pole mounting (optional)

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 (Optional: 1 × 50 Ω N-Female External Connector)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923/AS923-2
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)

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
Cellular Interface (Optional)	
Antenna	Internal Antenna
SIM Slot	1 (mini SIM-2FF)
Others	
Reset Button	1 × RST
Console Port	1 × Type-C
LED Indicators	1 × POWER, 1 × STATUS, 1 × LoRa, 1 × Wi-Fi, 1 × LTE, 1 × ETH
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.
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
Reliability	WAN Failover
App	Python SDK, Node-RED
Power Supply and Consumption	
Power Input	1. DC Jack Connector for 9-24 VDC power supply 2. 1 × 802.3 af PoE input
Power Consumption	Typical 2.9 W, Max 4.2 W
Physical Characteristics	
Ingress Protection	IP65
Dimensions	180 x 110 x 56.5 mm (7.09 x 4.33 x 2.22 in)
Installation	Desktop, Wall or Pole Mounting
Environmental	
Operating Temperature	-40°C to +70°C Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F

Dimensions (mm)

