Wi-Fi HaLow Gateway

HL31



HL31 is a lightweight indoor Wi-Fi HaLow gateway. Adopting Wi-Fi HaLow technology and a high-performance quad-core CPU, HL31 supports setting up more than 200 node transmission at the same time with low power consumption. HL31 has a line of sight up to 1 km and supports data rates up to 32 Mbps, which is suitable for IoT sensors and picture camera applications. HL31 supports not only multiple back-haul backups with Ethernet and cellular, but also provides multiple VPN solutions to secure the data transmission to remote servers.

With compact size and various kinds of power supply options, it is an ideal supplement for wide indoor areas such as offices, parking lots, campuses, etc.

◆ Application Example



◆ Features

- Industrial-grade quad-core CPU with ARM Cortex-A35 processor, providing high performance for data transmission
- Support up to 200 end-node connections
- Small in size for easy carrying & Deployment
- Desktop, wall, or ceiling mounting support
- Equipped with Wi-Fi for web GUI configuration
- Multi-backhaul backups with Ethernet and Cellular (4G)
- Secure transmission with VPN tunnels like IPsec/OpenVPN /GRE/L2TP/PPTP/DMVPN
- Function well with standard Wi-Fi HaLow sensors

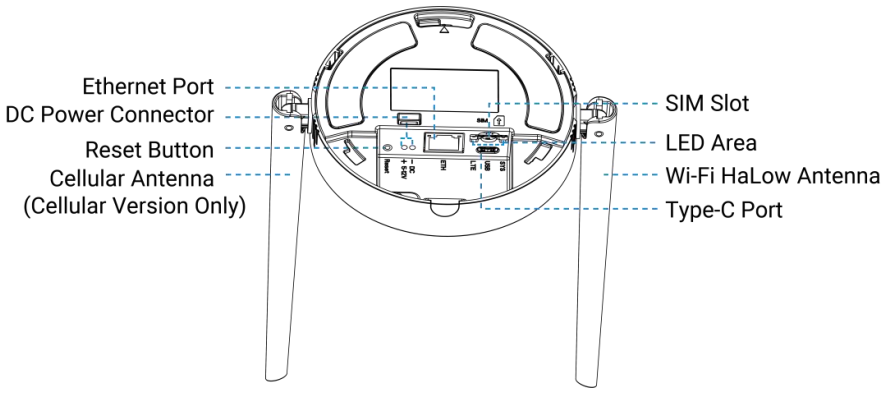
◆ Specifications

Hardware System	
CPU	Quad-core 1.3GHz, 64-bit ARM Cortex-A35
Memory	256 MB DDR3
Flash	4 GB eMMC
Wi-Fi HaLow	
Standard	IEEE 802.11ah (1 × 1)
Antenna	1 × External Antenna
Channel Bandwidth	1/2/4/8 MHz
Frequency	850~950 MHz (AU, EU, IN, KR, NZ, SG, US)
Data Rate	Up to 32 Mbps
Sensitivity	-77.5 ~ -109 dBm
Tx Power	21dBm Max
Mode	AP Mode
Security	WPA3-SAE
Cellular Interface (Optional)	
Network	4G LTE (CAT 4)/WCDMA/GSM
Antenna	1 x External Antenna
SIM Slots	1 (Micro SIM-3FF)
Ethernet Interface	
Port	1 × RJ45 WAN Port
Physical Layer	10/100 Base-T (IEEE 802.3)
Data Rate	10/100 Mbps (Auto-Sensing)

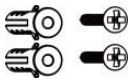
Interface	Auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)
Ethernet Isolation	1.5 kV RMS
Wi-Fi	
Standards	IEEE 802.11b/g/n, 2.4 GHz
Mode	AP Mode (Device Configuration Only)
Security	WPA-PSK/WPA2-PSK authentication, WEP/TKIP/AES encryption
Tx Power	802.11b: 18 dBm +/-2.0 dBm (11 Mbps) 802.11g: 15 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)
Others	
LED Indicators	1 × SYSTEM, 1 x LTE
Button	1 × Reset Button
USB	1 × USB 2.0 (Type-C) for Power Supply and Console
Built-in	Watchdog, Timer
Software	
Network Protocols	PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SSH, etc.
Firewalls	Access Control, DMZ, Port Mapping (DNAT), MAC Binding, Filtering (IP&Domain)
VPN Tunnel	OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN
DDNS	Supported >16 service providers, others can be configured manually
Multilevel Authority	Multiple Levels of User Authority
Reliability	WAN Failover
Diagnostics Tools	Ping, Traceroute, Tcpdump, QXDM, Log Server
Configuration	Web, CLI (SSH/Telnet), On-demand dial up, SNMP v1/v2c/v3
Event Alarm	Network Up/Down, VPN Up/Down, etc.
Power Supply and Consumption	
Power Input	1. 5V/2A by Type-C Port 2. 5~12V DC by DC Cable 3. 802.3af standard PoE input by PoE Splitter

Power Consumption	Typical 3.9 W, Maximum 5.2 W
Physical Characteristics	
Ingress Protection	IP30
Housing & Color	PC + ABS, Black
Weight	145g (Non-cellular Version), 163.4g (Cellular Version)
Dimensions	Φ 115 x 21 mm (Φ 4.52 x 0.83 in) (Antenna Excluded)
Installation	Desktop, Wall or Ceiling Mounting
Environmental	
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F
Approvals	
Regulatory	CE, FCC

◆ Hardware Overview



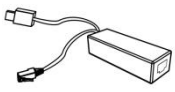
◆ Accessories



2 × Wall Mounting Kits



1 ×Type-C Cable & Power Adapter**



1 x PoE Splitter**

Note:

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

**One of the Type-C Cable&Power Adapter and PoE Splitter can be provided as standard accessories, while the other can be offered as an optional accessory.

◆ Dimensions(mm)

