# Wi-Fi HaLow Gateway

## HL31

**Milesight**

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

Wi-Fi HaLow

HL31

4G/Ethernet
Backhaul Connectivity

Cloud

## ◆ 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 |
| Output 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) |

### Wi-Fi

| Standards | IEEE 802.11b/g/n, 2.4 GHz |
|---|---|
| Mode | AP Mode (Device Configuration Only) |

### Others

| Button | 1 × Reset Button |
|---|---|
| Console Port | 1 × USB 2.0 (Type-C) for Power Supply and Console |
| LED Indicators | 1 × SYSTEM, 1 x LTE |
| Built-in | Watchdog, Timer |

### Software

| Network Protocols | PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SSH, etc. |
|---|---|
| VPN Tunnel | OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN |

### Power Supply and Consumption

| Power Input | 1. 5V by Type-C Port |
|---|---|
| | 2. 5~12V DC by 3.5mm 2-pin Terminal Block |
| | 3. 802.3af standard PoE input by (Optional) PoE Splitter |

### Physical Characteristics

| Ingress Protection | IP30 |
|---|---|
| Dimensions | Φ 115 x 21 mm (Φ 4.52 x 0.83 in) (Antenna Excluded) |
| Color & Material | Black, PC + ABS |
| Installation | Desktop, Wall or Ceiling Mounting |

### Environmental

| Operating Temperature | -20°C to +50°C (-4℉ to +122℉) |
|---|---|
| Storage Temperature | -40°C to +85°C (-40℉ to +185℉) |
| Ethernet Isolation | 1.5 kV RMS |
| Relative Humidity | 0% to 95% (non-condensing) at 25°C/77℉ |
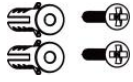
## ◆ Accessories

| | | |
|---|---|---|
| 2 × Wall Mounting Kits | 1 ×Type-C Cable & Power Adapter** | 1 x PoE Splitter (Optional)** |

**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.

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