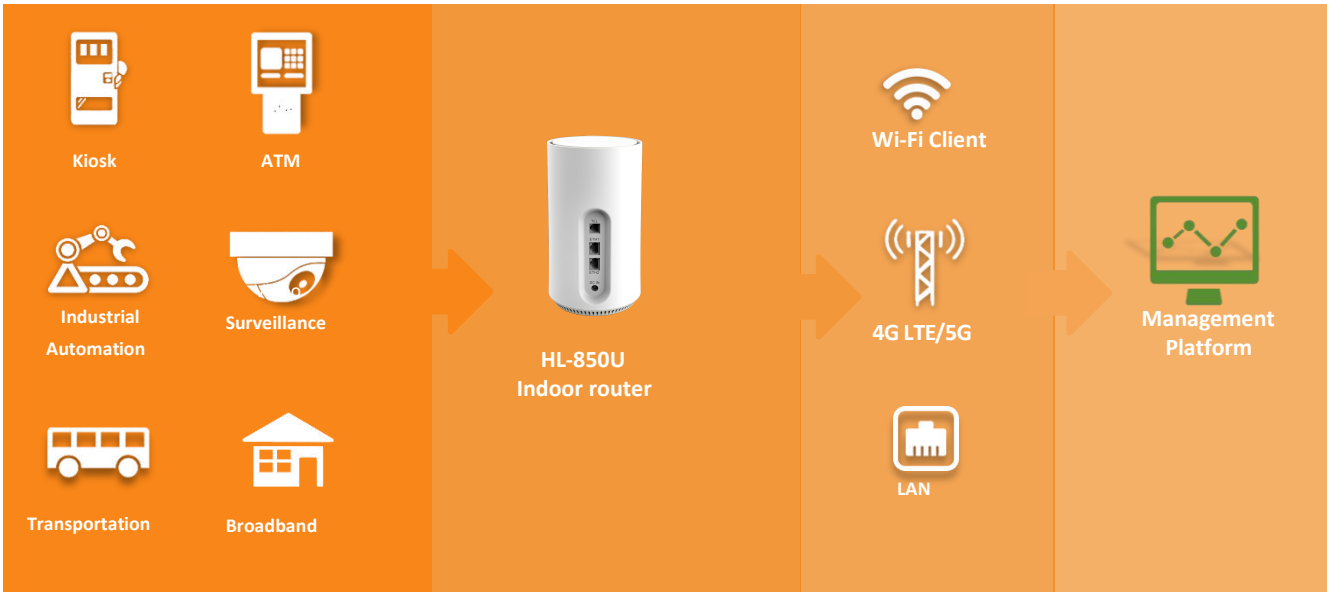
HL-850U
4G/5G Indoor router



Honlly HL-850U Cellular indoor router is a wireless communication product developed based on 3G/4G LTE/5G network requirements. Supports 3G/4G LTE/5G global frequency bands. Supports 3G/4G LTE/5G internet high speed access. Support 5G NSA up to 5.47Gbps (DL)/825Mbps (UL) . 5G SA maximum 4.67Gbps (DL)/1.25Gbps (UL) access bandwidth service. It supports 1*2.5Gbps/1* Gigabit Ethernet ports, one RJ11 telephone port, and supports VOLTE voice. Support for 802.11AX WIFI 6, 2.4GHz/5GHz dual-band feature. Supports WIFI mash feature. And provide users with WIFI 6, AX3000 large bandwidth hotspot sharing. Meet the access and sharing of more than 32 users' WIFI hotspot. Meet the needs of families, enterprises, and chain stores to provide 4G/5G high-speed Internet access services.

TYPICAL APPLICATION



Product features.

* Wireless Mobile Broadband 3G/4G LTE/ 5G connection.
* Supports 3G/4G/5G global frequency bands.
* Compliant with IEEE 802.11a/b/g/n/ac/ax, AX3000, 2*2 MIMO WIFI 6, support dual-band 2.4 GHz/5GHz .
* Support WIFI MESH feature.
* Supports Multiple VPN tunnels for data encryption .
* Power supply. DC 12V/2.0A
* ABS plastic material shell. Novel and fashionable appearance.

Easy to use and easy maintenance

* User friendly web interface for user interaction.
* Supports Central Management.
* Supports local web UI and remote FOTA update firmware.

Operating system

* Built-in OpenWRT 24.10 operating system.

SPECIFICATIONS

Cellular feature	
3G/4G/5G data connectivity	It provides data connectivity on 5G NR SA and NSA, LTE-FDD, LTE-TDD, DC-HSDPA, HSPA+, HSDPA,HSUPA and UMTS networks.
3G/4G/5G Frequency bands	**5G NR:** 5G Sub-6: n1/3/5/7/8/20/28/38/40/41/77/78 LTE FDD: B1/3/5/7/8/20/28/32 LTE TDD: B38/40/41/42/43 WCDMA: B1/5/8 MIMO: 5G NR: DL 4×4 MIMO: n1/3/7/28/38/40/41/77/78 UL 2×2 MIMO: n40/41/77/78 LTE: DL 4×4 MIMO: B1/3/7/28/32/38/40/41/42/43 **Remarks.** More frequency bands or requirements please contact with us.
3G/4G/5G Data rates	◆ **5G NSA.** Max 5.47Gbps (DL)/825Mbps (UL) ◆ **5G SA.** Max maximum 4.67Gbps (DL)/1.25Gbps (UL) ◆ **LTE.** Max 1.6Gbps (DL)/211Mbps (UL) ◆ **WCDMA.** Max 42Mbps (DL)/ 11.5Mbps (UL)
5G NR features	◆ 3GPP Release 16 ◆ Supported modulations: - Uplink: π/2-BPSK, QPSK, 16QAM, 64QAM and 256QAM, 200MHz 2 UL CA - Downlink: QPSK, 16QAM, 64QAM and 256QAM, 200MHz 2 DL CA ◆ Supported SCS: 15 kHz and 30 kHz ◆ Option 3x, 3a, 3 and Option 2
LTE features	◆ 3GPP Release 16 ◆ LTE Category: DL Cat 19/ UL Cat 18 ◆ Supported modulations. - Uplink: QPSK, 16QAM and 64QAM and 256QAM, 40MHz 2 ULCA - Downlink: QPSK, 16QAM and 64QAM and 256QAM, 100MHz 5 DLCA, ◆ Supports 1.4/3/5/10/15/20 MHz RF bandwidth
UMTS features	◆ Compliant with 3GPP Rel-8 DC-HSDPA, HSPA+, HSDPA, HSUPA and WCDMA ◆Modulations: – DL: QPSK, 16QAM and 64QAM – UL: BPSK, QPSK, 16QAM
3G/4G/5G Transmitting Power	◆ Class 3 (24dBm±1.5dB) for WCDMA bands ◆ Class 3 (23dBm±2dB) for LTE-FDD bands ◆ Class 3 (23dBm±2dB) for LTE-TDD bands ◆ Class 3 (23dBm±2dB) for NR bands ◆ Class 2 (26dBm±2dB) for NR N41/77/78 ◆ Class 1.5 (29dBm±2dB) for NR N41/77/78
Antennas	4 * 4G/5G internal antenna,4*4 MIMO, with 50 Ω impedance.

SIM card feature	
SIM card	Supports 1* SIM slots, 1.8V / 3V . Or 1* eSIM card. (**Optional**)
Hardware feature	
CPU	Quad-core ARM Cortex-A55 up to 2GHz, **Unisoc V620**
Hardware interface	1*2.5Gbps WAN/LAN+1*Gbps LAN ports. 1*USB2.0 port, 1*RJ11 VOLTE (**Optional**)
Watchdog	Built-in watchdog feature.
Key button	Reset, WPS or MESH
Protection level	Ethernet port , Contact electric shock, +/-4KV, air discharge: +/-8KV.
LED status indicator	Power, Net, WIFI
Power Supply	Power supply input. DC 12V/2.0A
Peak current	Max current. 2.0A @12V
Working current	Max 450 mA, 5.4W @12 V
Power Consumption	**Idle.** 120mA, 1.44W @12 V **Data link.** Max 450 mA, 5.4W @12 V **Peak.** Max 710mA , 8.52W @12V
Temperature	Operating Temperature 0 ºC ~+50ºC, Storage Temperature -10~+55ºC
Environment	5%~95% ,no condensation.
Ingress Protection	IP30
Housing	ABS plastic material, white shell.
Dimensions	110mm*112mm * 195mm
Installations	Desktop placement
Weight	670g
Wi-Fi 6	
WLAN	* IEEE 802.11 a/b/g/n/ac/ax, AX3000 wifi 6 . Max bandwidth 2975Mbps * Supports 2.4G/5GHz WIFI 6. * Supports Dynamic Frequency Selection (DFS, radar detection). * Supports 20 MHz/40 MHz channel bandwidth for 2.4 GHz and 20 MHz/40 MHz/80 MHz/160 MHz channel bandwidth for 5 GHz. * Supports 2x2 Multi-User Multiple-Input Multiple-Output (MU-MIMO).
Wireless Mode	Supports AP mode.
Wireless Security	Supports WPA2-PSK (AES), WPA/WPA2-PSK (TKIP/AES) protocols for Wi-Fi Authentication .
Antennas	2*2 MIMO internal antenna , with 50 Ω impedance.
WIFI hotpot sharing	Supports more than 32 users to share WIFI for accessing to the Internet.
Software feature	
Parameter settings	Supports automatic detection of MNC and MCC parameters of global operators. Built-in global operator APN, user name, password and other network parameters. At the same time, manual setting of network parameters is supported.
Dial method	After the device is powered on, the system automatically dials up to connect to the network.
Protocol	Supports TCP,UDP,DHCP,HTTP,DDNS,TR-069,HTTPS,SSH etc protocol.
Routing	Supports static routing, multiple routing tables.
Multiple APN	Supports multiple APN access network.
Data link maintenance	Built-in link maintenance and self-recovery mechanism.
Firewall	Support flexible access control of TCP, UDP, ICMP packets. Supports port Mapping, NAT etc feature.
Firmware update	Supports local WebUI and remote OTA update firmware.

Embedded system	**OpenWRT 24.10**
Application development	Supports secondary development of application functions based on our device motherboard software.
Monitoring & Management	
Web GUI	HTTP, Firmware Upgrade
Management	Supports TR-069 remote management protocol.

Dimensions.

110mm



195mm

112mm