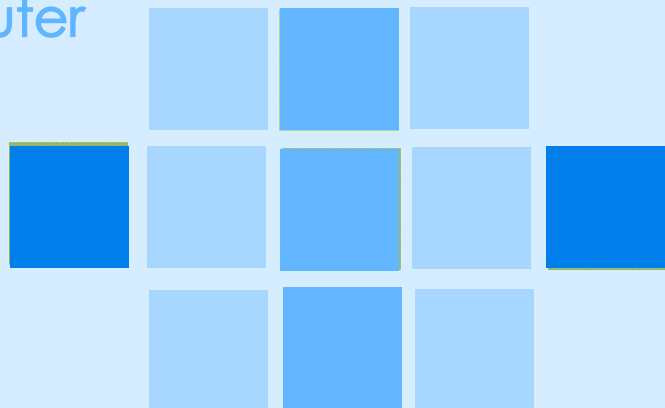


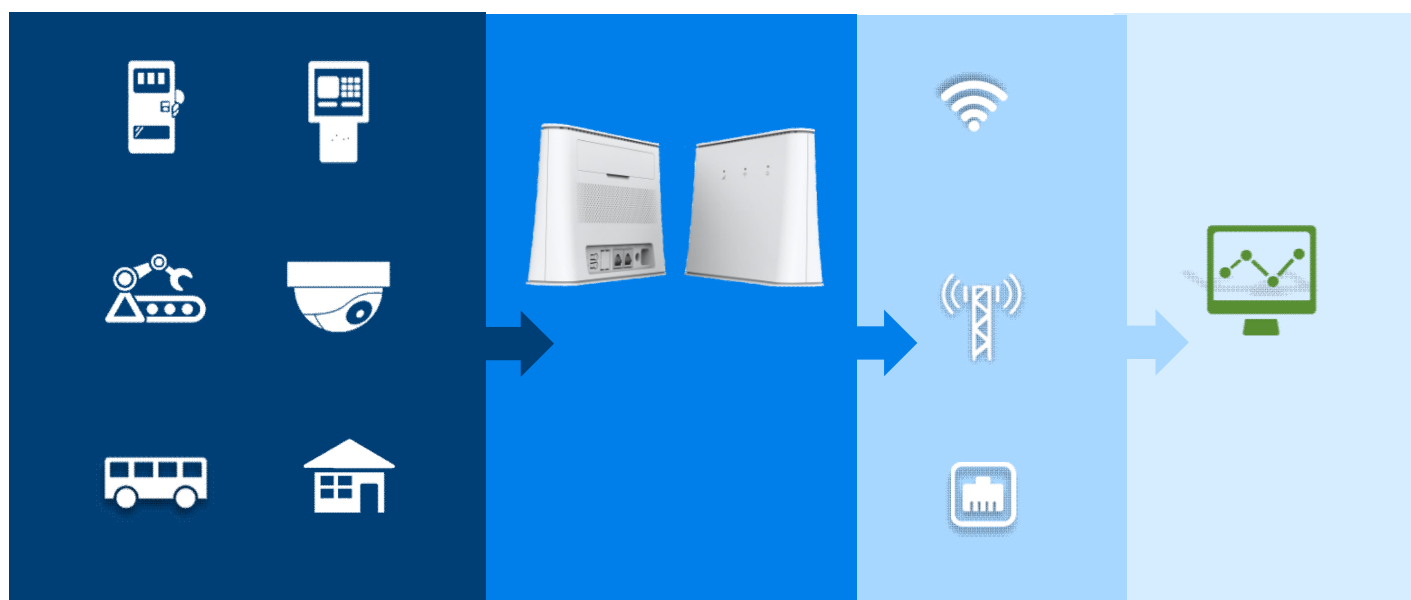
SG-HiR204-A 4G CAT 6, indoor router

(V1.01)



SIGNAL TECH SG-HiR204-A 4G LTE CAT 6 indoor router is a wireless communication product developed based on 3G/4G LTE network requirements. Supports 3G/4G LTE global frequency bands. Supports 3G/4G LTE internet high speed access. Support 4G LTE CAT 6, Up to 300Mbps (DL)/50Mbps (UL) of LTE-FDD mode. Maximum 220Mbps (DL)/30Mbps (UL) of LTE-TDD mode access bandwidth service. Supports 802.11AC WIFI 5, 2.4GHz/5GHz function. And provide users with WIFI 5 large bandwidth hot spot sharing. Meet the access and sharing of more than 10 users' WIFI hot spot. Also, it provides one Gigabit Ethernet port for user access internet. Meet the needs of families, tourism, enterprises and chain stores to provide 3G/4G LTE high-speed Internet access services.

TYPICAL APPLICATION



Product features.

- ◆ Wireless Mobile Broadband 3G/4G LTE connection. Supports 3G/4G LTE global frequency bands.
- ◆ Compliant with IEEE 802.11a/b/g/n/ac, WIFI 5, support 2.4 GHz/5 GHz .
- ◆ System crashes and automatically recovers. The system automatically maintains the data link and is permanently online.
- ◆ Supports Multiple VPN tunnels for data encryption .
- ◆ Power supply. DC 5V/2.5A .
- ◆ Optional support for lithium battery backup power supply.
- ◆ ABS plastic material shell. Novel and fashionable appearance.

Easy to use and easy maintenance

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

Operating system

- ◆ Built-in **OpenWRT 21.02** operating system.

Specifications.

Cellular feature	
3G/4G data connectivity	It provides data connectivity on LTE-FDD, LTE-TDD, DC-HSDPA, HSPA+, HSDPA, HSUPA and WCDMA networks.
3G/4G Frequency bands	<p>LTE FDD: B1/ 3/ 5/ 7/ 8/ 20/ 28/ 32</p> <p>LTE-TDD: B38/B40/B41</p> <p>WCDMA: B1/B5/B8</p> <p>2CA</p> <p>B1 + B1/ 3/ 5/ 7/ 8/ 20/ 28.</p> <p>B3 + B3/ 5/ 7/ 8/ 20/ 28.</p> <p>B7 + B5/ 7/ 8/ 20/ 28.</p> <p>B20 + B32.</p> <p>B38 + B38, B40 + B40, B41 + B41</p> <p>Remarks. More frequency bands or requirements please contact with us.</p>
3G/4G Data rates	<ul style="list-style-type: none"> ◆ LTE-FDD. Max 300Mbps (DL)/50Mbps (UL) ◆ LTE-TDD. Max 220Mbps (DL)/30Mbps (UL) ◆ HSPA+. Max 42Mbps (DL)/ 5.76Mbps (UL) ◆ UMTS. Max 384Kbps (DL)/384Kbps (UL)
LTE features	<ul style="list-style-type: none"> ◆ Support 3GPP Rel-10 Cat 6 FDD and TDD ◆ Support 1.4/3/5/10/15/20 MHz RF bandwidth ◆ Support uplink QPSK, 16QAM modulations ◆ Support downlink QPSK, 16QAM and 64QAM modulations ◆ Support 4 × 2, 2 × 2 MIMO in DL direction
UMTS features	<ul style="list-style-type: none"> ◆ Support 3GPP Rel-8 DC-HSDPA/HSPA+/HSDPA/HSUPA/WCDMA ◆ Support QPSK, 16QAM, 64QAM modulations ◆ DC-HSDPA: Max. 42 Mbps (DL) ◆ HSUPA: Max. 5.76 Mbps (UL) ◆ WCDMA: Max. 384 kbps (DL)/384 kbps (UL)

3G/4G Receiving Sensitivity	LTE-FDD B1(10MHz) , -96.3 dBm LTE-FDD B3(10MHz) , -93.3 dBm LTE-FDD B5(10MHz) , -94.3 dBm LTE-FDD B7(10MHz) , -94.3 dBm LTE-FDD B8(10MHz) , -93.3 dBm LTE-FDD B20(10MHz) , -93.3 dBm LTE-FDD B28(10MHz) , -94.8 dBm LTE-FDD B32(10MHz) , -96.3 dBm LTE-TDD B38(10MHz) , -96.3 dBm LTE-TDD B40(10MHz) , -96.3 dBm LTE-TDD B41(10MHz) , -94.3 dBm WCDMA B1 , -106.7 dBm WCDMA B5 , -104.7 dBm WCDMA B8 , -103.7dBm
3G/4G/5G Transmitting Power	<ul style="list-style-type: none"> ◆ Class 3 (23dBm ± 2dB) for WCDMA bands. ◆ Class 3 (23dBm ± 2dB) for LTE-FDD bands. ◆ Class 3 (23dBm ± 2dB) for LTE-TDD bands.
Antennas	2 * 4G internal antenna, 2*2 MIMO, with 50 Ω impedance.
SIM card feature	
SIM card	Supports 1* SIM slot, 1.8V / 3V . Or 1* eSIM card. (Optional)
Hardware feature	
CPU	ARM Cortex - A7, 1.5GHz
MEMORY	NAND FLASH 1Gb, DDR2 1Gb
Hardware interface	1*USB2.0 port, 1*RJ45 Gigabit ETH port.
Watchdog	Built-in watchdog feature.
Key button	Power key, Reset
LED status indicator	Power, net, WIFI, LAN
Power Supply	Power supply input. DC 12V/1A
Peak current	Max current. 1A @12V
Working current	Max 360 mA, 4.32W @12 V
Power Consumption	Idle. 80mA, 0.96W @12 V Data link. Max 360 mA, 4.32W @12 V Peak. Max 470mA , 5.64W @12V
Temperature	Operating Temperature 0 °C ~+50°C, Storage Temperature -10~+55°C
Environment humidty	5%~95% ,no condensation.
Ingress Protection	IP30
Housing	ABS plastic material, white shell.
Dimensions	155mm * 125mm * 36mm
Installations	Desktop placement
Weight	280g
Wi-Fi	
WLAN	<ul style="list-style-type: none"> ◆ IEEE 802.11 a/b/g/n/ac , WIFI 5 . ◆ Supports 2.4G/5GHz. ◆ 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 channel bandwidth for 5 GHz. ◆ Supports 2T/2R transmission mode.

Wireless Mode	Supports AP or station mode.
Wireless Security	Supports WEP/ TKIP/ AES/ WPA-PSK/ WPA2-PSK encryption.
WIFI Modulation	Supports BPSK、QPSK、 CCK、 16QAM、 64QAM、 256QAM modulation technology.
Transmission Data Rates	<ul style="list-style-type: none"> ◆ 802.11a. 54Mbps ◆ 802.11b. 11Mbps ◆ 802.11g. 54Mbps ◆ 802.11n. 150Mbps ◆ 802.11ac. 433Mbps
WIFI transmit power	<ul style="list-style-type: none"> ◆ 2.4GHz, 802.11b/1Mbps: 17dBm ◆ 2.4GHz, 802.11b/11Mbps: 17dBm ◆ 2.4GHz, 802.11g/6Mbps: 16.5dBm ◆ 2.4GHz, 802.11g/54Mbps: 15dBm ◆ 2.4GHz, 802.11n, HT20@MCS0: 16.5dBm ◆ 2.4GHz, 802.11n, HT40@MCS0: 15dBm ◆ 2.4GHz, 802.11n, HT20@MCS7: 13.31dBm ◆ 2.4GHz, 802.11n, HT40@MCS7: 14dBm
	<ul style="list-style-type: none"> ◆ 802.11a/6 Mbps , 15 dBm ◆ 802.11a/54 Mbps, 12 dBm ◆ 802.11n/HT20 MCS0, 14 dBm ◆ 802.11n/HT20 MCS7, 11 dBm ◆ 802.11n/HT40 MCS0, 14 dBm ◆ 802.11n/HT40 MCS7, 11 dBm ◆ 802.11ac/VHT20 MCS0, 14 dBm ◆ 802.11ac/VHT20 MCS8, 11 dBm ◆ 802.11ac/VHT40 MCS0, 13 dBm ◆ 802.11ac/VHT40 MCS9, 8.5 dBm ◆ 802.11ac/VHT80 MCS0, 13 dBm ◆ 802.11ac/VHT80 MCS9, 9 dBm
WIFI Rx Sensitivity	<ul style="list-style-type: none"> ◆ 2.4GHz, 802.11b@1Mbps: -95dBm ◆ 2.4GHz, 802.11b@11Mbps: -88dBm ◆ 2.4GHz, 802.11g@6Mbps: -90dBm ◆ 2.4GHz, 802.11g@54Mbps: -74dBm ◆ 2.4GHz, 802.11n, HT20@MCS0: -90dBm ◆ 2.4GHz, 802.11n, HT40@MCS0: -87dBm ◆ 2.4GHz, 802.11n, HT20@MCS7: -71dBm ◆ 2.4GHz, 802.11n, HT40@MCS7: -68.5dBm
	<ul style="list-style-type: none"> ◆ 802.11a/6 Mbps, -90.5 dBm ◆ 802.11a/54 Mbps, -74 dBm ◆ 802.11n/HT20 MCS0, -90 dBm ◆ 802.11n/HT20 MCS7, -71 dBm ◆ 802.11n/HT40 MCS0, -87.5 dBm ◆ 802.11n/HT40 MCS7, -68.5 dBm ◆ 802.11ac/VHT20 MCS0, -90 dBm ◆ 802.11ac/VHT20 MCS8, -67 dBm ◆ 802.11ac/VHT40 MCS0, -87 dBm ◆ 802.11ac/VHT40 MCS9, -62.5 dBm ◆ 802.11ac/VHT80 MCS0, -84.5 dBm ◆ 802.11ac/VHT80 MCS9, -59.5 dBm
Antennas	2*2 MIMO internal antenna , with 50 Ω impedance.
WIFI hotspot sharing	Supports more than 10 users to share WIFI access 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 PPTP,L2TP,IPSEC VPN,TCP,UDP,DHCP,HTTP,DDNS,TR-069 etc protocol.
Routing	Supports static routing, multiple routing tables.
Multiple APN	Supports multiple APN access network.

System Assurance	Supports system automatic detection mechanism, automatic recovery of system abnormality or crash.
Data Link Assurance	Built-in link maintenance and self-recovery mechanism.
Firewall	Supports port Mapping, NAT etc feature.
DDNS	Supported some service providers, others can be configured manually.
Firmware update	Supports local WebUI and remote OTA update firmware.
VLAN	Supports VLAN feature.
Embedded system	OpenWRT 21.02
Application development	Supports secondary development of application functions based on our device motherboard software.
VPN	
VPN Feature	Supports Open VPN, IPSEC VPN,PPTP,L2TP etc VPN feature.
MONITORING & MANAGEMENT	
Web GUI	HTTP, Firmware Upgrade
Command Line Interface	SSHv2
Management platform	Remote Management Platform

Dimensions.

