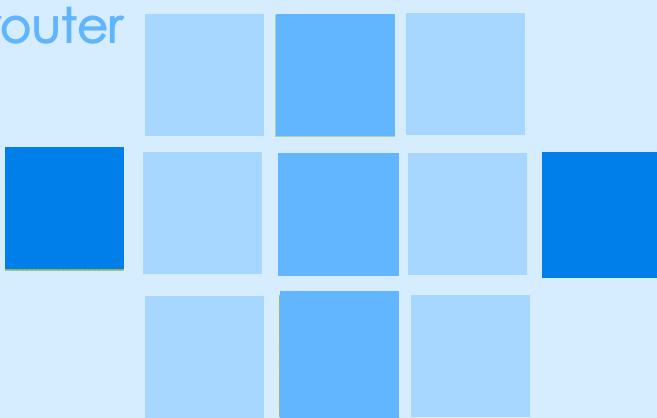


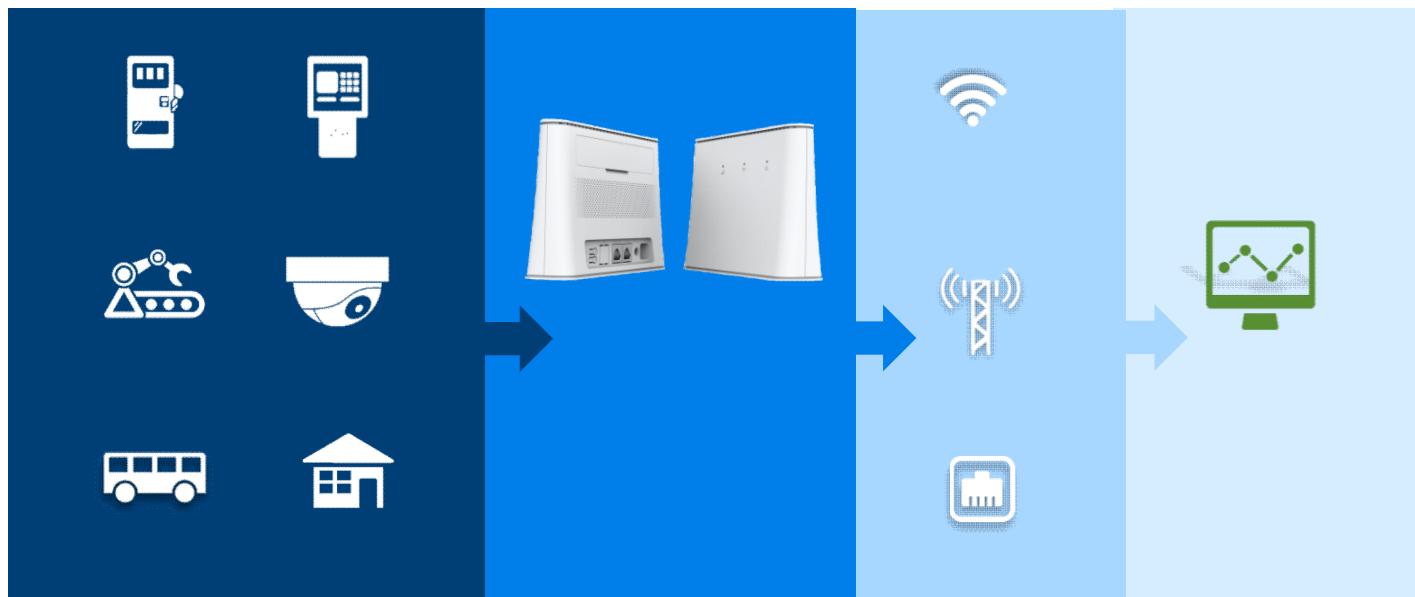
SG-HIR204 4G CAT 6,CAT 12 indoor router

(V1.02)



SIGNAL TECH SG-HIR204 wireless router is a wireless communication product developed based on 4G network requirements. Support 4G LTE global frequency band. Support 4G LTE CAT 6 or CAT 12 high speed access to the Internet. It can realize the maximum downlink bandwidth of 300Mbps~600Mbps and the maximum uplink bandwidth of 50Mbps~150Mbps. It supports 2 Gigabit Ethernet ports, providing stable and high-speed wireless broadband access for home and business users. Support for WIFI 2.4GHz/5GHz dual-band function to meet the access and sharing needs of more than 60 users' WIFI hotspots.

TYPICAL APPLICATION



- ◆ Power supply. DC +12V/1.5A .
- ◆ Supports 2*2 MIMO or 4*4 MIMO internal antenna or external antenna.
- ◆ Wireless Mobile Broadband 3G / 4G LTE connection. Support 3G/4G LTE global frequency bands.
- ◆ System crashes and automatically recovers. The system automatically maintains the data link and is permanently online.
- ◆ Supports Multiple VPN tunnels for data encryption .
- ◆ Simple and beautiful, fashionable shell.

Easy to use and easy maintenance

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

Operating system

- ◆ Built-in **OpenWRT 18.06** operating system. Support user secondary application development.

Specifications.

Cellular feature

3G/4G LTE data connectivity	It provides data connectivity on LTE-FDD, LTE-TDD, DC-HSDPA, HSPA+, HSDPA, HSUPA and WCDMA networks.
3G/4G LTE Frequency bands	<p>Version E. LTE-FDD: B1/B3/B5/B7/B8/B20/B28/B32 LTE-TDD: B38/B40/B41/B42(Optional) /B43(Optional) WCDMA: B1/B3/B5/B8</p> <p>Verison A. LTE-FDD: B2/B4/B5/B7/B12/B13/B14/B25/B26/B29/B30/B66/B71 LTE-TDD: B41/B48</p> <p>Version LA. LTE-FDD: B2/B4/B5/B7/B8/B28/B66 LTE-TDD: B42(Optional) /B43(Optional) WCDMA: B2/B4/B5/B8</p> <p>Remarks. More Bands Demands please contact with us.</p>
3G/4G LTE Data rates	<p>4G LTE-CAT 6 LTE-FDD Max 300M(DL) , Max 50Mbps (UL) LTE-TDD Max 226M (DL) , Max 28Mbps (UL).</p> <p>4G LTE-CAT 12 LTE-FDD. Max 600Mbps (DL), Max 150Mbps (UL) . LTE-TDD. Max 430Mbps (DL), Max 90Mbps (UL).</p> <p>HSPA+. DL 42Mbps, UL 11.2Mbps.</p> <p>WCDMA. DL 384Kbps, UL 384Kbps</p>
3G/4G LTE Transmitting Power	<ul style="list-style-type: none"> ◆ Class 3 (23 dBm±2 dB) for LTE-TDD bands ◆ Class 3 (23 dBm±2 dB) for LTE-FDD bands ◆ Class 3 (24 dBm+ 1/-3 dB) for WCDMA bands

3G/4G LTE Receiving Sensitivity	WCDMA B1 , -106.7 dBm
	WCDMA B2 , -104.7 dBm
	WCDMA B3 , -103.7 dBm
	WCDMA B4 , -106.7 dBm
	WCDMA B5 , -104.7 dBm
	WCDMA B6 , -106.7 dBm
	WCDMA B8 , -103.7 dBm
	WCDMA B19 , -106.7 dBm
	LTE-FDD B1(10MHz) , -96.3 dBm
	LTE-FDD B2(10MHz) , -94.3 dBm
	LTE-FDD B3(10MHz) , -93.3 dBm
	LTE-FDD B4(10MHz) , -96.3 dBm
	LTE-FDD B5(10MHz) , -94.3 dBm
	LTE-FDD B7(10MHz) , -94.3 dBm
	LTE-FDD B8(10MHz) , -93.3 dBm
	LTE-FDD B12(10MHz) , -93.3 dBm
	LTE-FDD B13(10MHz) , -93.3 dBm
	LTE-FDD B14(10MHz) , -93.3 dBm
	LTE-FDD B17(10MHz) , -93.3 dBm
	LTE-FDD B18(10MHz) , -96.3 dBm
	LTE-FDD B19(10MHz) , -96.3 dBm
	LTE-FDD B20(10MHz) , -96.3 dBm
	LTE-FDD B25(10MHz) , -92.8 dBm
	LTE-FDD B26(10MHz) , -93.8 dBm
	LTE-FDD B28(10MHz) , -94.8 dBm
	LTE-FDD B30(10MHz) , -95.3 dBm
	LTE-FDD B32(10MHz) , -96.3 dBm
	LTE-FDD B66(10MHz) , -95.8 dBm
	LTE-FDD B71(10MHz) , -94.3 dBm
	LTE-TDD B38(10MHz) , -96.3 dBm
	LTE-TDD B39(10MHz) , -96.3 dBm
	LTE-TDD B40(10MHz) , -96.3 dBm
	LTE-TDD B41(10MHz) , -94.3 dBm
	LTE-TDD B42(10MHz) , -95 dBm
	LTE-TDD B43(10MHz) , -95 dBm
	LTE-TDD B46(20MHz) , -88.5 dBm
	LTE-TDD B48(10MHz) , -95 dBm
LTE features	CAT 6 version. ◆ Supports 3GPP Rel-12 CAT 6 FDD and TDD ◆ Supports uplink QPSK and 16 QAM modulation. ◆ Supports downlink QPSK , 16 QAM and 64 QAM. ◆ Supports 1.4MHz to 40MHz (2 CA) RF bandwidth.
	CAT 12 version. ◆ Supports 3GPPRel-12 CAT 12 FDD and TDD. ◆ Supports uplink QPSK ,16 QAM and 64 QAM modulation. ◆ Supports downlink QPSK , 16 QAM ,64 QAM and 256 QAM. ◆ Supports 1.4MHz to 60MHz (3 CA) RF bandwidth.
UMTS features	◆ Supports 3GPP Rel-9 DC-HSDPA,DC-HSUPA,HSPA+,HSDPA,HSUPA and WACDMA ◆ Supports QPSK ,16 QAM and 64 QAM modulation.
Antennas	Supports 2*2 MIMO or 4*4 MIMO internal antenna or external antenna with 50 Ω impedance.
SIM card feature	
SIM card	Supports 1* SIM slots, 1.8V / 3V . Or 1* eSIM card. (Optional)
Hardware feature	
CPU	MTK7621A, MIPS1004KC, 880Mbps,Dual-core.
MEMORY	FLASH 16MByte, DDR3 64 MByte
Hardware interface	1*WAN/1* LAN gigabit Ethernet port. 1*USB2.0 port.1*RJ11 telephone port,VOLTE (Optional).

Watchdog	Built-in watchdog feature.
Key button	Power,Reset,WPS
Protection level	Ethernet port , Contact electric shock, +/-4KV, air discharge: +/-8KV.
LED Indicator	PWR ,WIFI, Net, WAN, LAN
Standard Power	DC input. DC +12V/1.5A
Power Supply	DC input. DC +9/1.5A~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°C ~ +60°C
Environment humidity	5%~95% ,no condensation.
Ingress Protection	IP30
Housing	ABS Plastic shell
Dimensions	155mm * 125mm * 36mm
Installations	Desktop mounted.
Weight	219g
Wi-Fi	
WLAN	<ul style="list-style-type: none"> ◆ IEEE 802.11b/g/n/ac. ◆ Supports 20MHz,40MHz,80MHz in 5GHz band, and 20MHz,40MHz bandwidth in 2.4GHz band. ◆ Max bandwidth 300Mbps in 2.4GHz band. Max bandwidth 867Mbps in 5GHz band.
Wireless Mode	Access Point (AP), Client
WLAN Speed	300 Mbps @2.4GHz, 867Mbps @5GHz.
Wireless Security	Supports WPA, WPA2,WPAI, WEP, TKIP encryption.
Frequency Bands	2.4 GHz/5GHz
WIFI transmit power	<p>2.4GHz Tx power.</p> TX CCK, 11Mbps @ -20dBm HT40,MCS 8 @ -20dBm HT40,MCS 15 @ -17dBm <p>5GHz Tx power.</p> 6Mbps OFDM @ -19.5dBm 54Mbps OFDM @ -18dBm HT20,MCS 0 @ -18.5dBm HT20,MCS 7 @ -17dBm HT40,MCS 0 @ -18.5dBm HT40,MCS 7 @ -17dBm VHT80,MCS 0 @ -18.5dBm VHT80,MCS 9 @ -16dBm

WIFI Rx Sensitivity	2.4GHz Rx sensitivity.
	1Mbps CCK @ -98dBm
	2Mbps CCK @ -94dBm
	5.5Mbps CCK @ -92dBm
	11Mbps CCK @ -89dBm
	5GHz Rx sensitivity.
	6Mbps OFDM @ -93.5dBm
	9Mbps OFDM @ -91.5dBm
	12Mbps OFDM @ -91dBm
	18Mbps OFDM @ -88.5dBm
Antennas	2*2 MIMO, 2 * SMA male antenna connectors with 50 Ω impedance.
WIFI hotspot sharing	Supports more than 60 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,HTTPS,SSH,SNMP etc protocol.
Routing	Supports static routing, multiple routing tables.
Bridge	Supports 4G/5G bridge feature.
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 data link maintenance and self-recovery mechanism.
Firewall	Supports flexible access control of TCP, UDP, ICMP packets. 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 18.06
Application development	Supports secondary development of application functions based on our device motherboard software.
VPN	
VPN Feature	Supports OpenVPN, IPSEC VPN,PPTP,L2TP etc VPN feature.
MONITORING & MANAGEMENT	
Web GUI	HTTP, Firmware Upgrade
Command Line Interface	SSHv2 ,Telnet.
Management platform	Remote Management Platform

Dimensions.

