



## **SC-5003-5GR 5G CPE indoor Router with 2 Gigabit Ethernet ports, one RJ11, WIFI hotspots**



SC-9003-5GR Cellular indoor router is a wireless communication product developed based on 4G LTE/5G network requirements. Supports 4G LTE/5G global frequency bands. Supports 4G LTE/5G internet high speed access. Support 5G NSA. Up to 2.5Gbps (DL)/650Mbps (UL), 5G SA. Maximum 2.1Gbps (DL)/900Mbps (UL) access bandwidth service.

It supports 2 Gigabit Ethernet ports, one RJ11 telephone port, and supports VOLTE voice. Support for 802.11AX WIFI 6, 2.4GHz/5GHz dual-band function. Meet the needs of families, enterprises, and chain stores to provide 4G/5G high-speed Internet access services. And provide users with WIFI 6, AX1800 large bandwidth hotspot sharing. Meet the access and sharing of more than 32 users' WIFI hotspots.

### **Product features:**

- ◆ Wireless Mobile Broadband 3G/4G LTE/ 5G Connection. Supports 3G/4G/5G 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 .
- ◆ Power supply. DC 12V/1.5A
- ◆ Industrial design for harsh environment.
- ◆ 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 19.07 operating system.

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### **LTE Band:**

<b>3G/4G/5G</b>	It provides data connectivity on 5G NR SA and NSA, LTE-FDD, LTE-TDD, DC-HSDPA,
<b>data connectivity</b>	HSPA+, HSDPA, HSUPA and WCDMA networks.
<b>3G/4G/5G</b>	<b>Band Version 1</b>
<b>Frequency bands</b>	5G NR. n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78/n79 LTE-FDD. B1/B3/B5/B7/B8/B18/B19/B20/B26/B28/B32 LTE-TDD. B34/B38/B39/B40/B41/B42 WCDMA. B1/B3/B5/B6/B8/B19 DL 4*4 MIMO. B1/B3/B38/B40/B41/B42
	<b>Band Version 2</b>
	5G NR. n2/n5/n7/n12/n25/n41/n48/n66/n71/n77/n78 LTE-FDD. B2/B4/B5/B12/B13/B14/B25/B26/B29/B30/B66/B71/B41 LTE-TDD. B41/B48 WCDMA. B2/B4/B5 DL 4*4 MIMO. B2/B4/B25/B30/B41/B66

**Remarks.** More frequency bands or requirements please contact with us.

<b>3G/4G/5G</b>	◆ <b>5G NSA.</b> Max 2.5Gbps (DL)/650Mbps (UL)
<b>Data rates</b>	◆ <b>5G SA.</b> Max 2.1Gbps (DL)/900Mbps (UL)
	◆ <b>LTE.</b> Max 1.0Gbps (DL)/200Mbps (UL)
	◆ <b>DC-HSDPA.</b> Max 42Mbps (DL)
	◆ <b>HSUPA.</b> Max 5.76Mbps (UL)
	◆ <b>WCDMA</b> Max 384Kbps (DL)/384Kbps (UL)

<b>5G NR features</b>	<p>3GPP Rel-15</p> <ul style="list-style-type: none"> <li>◆ Modulation:</li> <li>- Uplink 256QAM</li> <li>- Downlink 256QAM</li> <li>◆ Downlink 4 x4 MIMO on n1/n2/n3/n7/25/n38/n40/n41/n48/n66/n77/n78/n79</li> <li>◆ Uplink 2 x 2 MIMO on n41/n77/n78/n79</li> <li>◆ SCS 15 kHz and 30 kHz</li> <li>◆ 5G NR refarmed band bandwidth ≤ 20 MHz</li> <li>◆ 5G NR n41/n77/n78/n79 bandwidth ≤ 100 MHz</li> <li>◆ SA and NSA operation modes</li> <li>◆ NSA on n41/n77/n78/n79</li> <li>◆ SA on all the 5G bands</li> <li>◆ Option 3x, 3a, and Option 2</li> </ul>
<b>LTE features</b>	<ul style="list-style-type: none"> <li>◆ Supports up to CA Cat 20 FDD and TDD</li> <li>◆ Supports uplink QPSK, 16-QAM and 64-QAM and 256-QAM modulation</li> <li>◆ Supports downlink QPSK, 16-QAM and 64-QAM and 256-QAM modulation</li> <li>◆ Supports 1.4MHz to 20MHz (5xCA) RF bandwidth</li> <li>◆ Supports 4 * 4 MIMO in DL direction</li> </ul>
<b>UMTS features</b>	<ul style="list-style-type: none"> <li>◆ Supports 3GPP R8 DC-HSDPA, HSPA+, HSDPA standard.</li> <li>◆ Supports QPSK, 16-QAM and 64-QAM modulation.</li> </ul>
<b>3G/4G/5G</b>	
<b>Receiving Sensitivity</b>	<p>WCDMA B1 , -106.7 dBm</p> <p>WCDMA B2 , -104.7 dBm</p> <p>WCDMA B3 , -103.7 dBm</p> <p>WCDMA B4 , -106.7 dBm</p> <p>WCDMA B5 , -104.7 dBm</p> <p>WCDMA B6 , -106.7 dBm</p> <p>WCDMA B8 , -103.7 dBm</p> <p>WCDMA B19 , -106.7 dBm</p> <p>LTE-FDD B1(10MHz) , -96.3 dBm</p> <p>LTE-FDD B2(10MHz) , -94.3 dBm</p> <p>LTE-FDD B3(10MHz) , -93.3 dBm</p> <p>LTE-FDD B4(10MHz) , -96.3 dBm</p> <p>LTE-FDD B5(10MHz) , -94.3 dBm</p> <p>LTE-FDD B7(10MHz) , -94.3 dBm</p> <p>LTE-FDD B8(10MHz) , -93.3 dBm</p> <p>LTE-FDD B12(10MHz) , -93.3 dBm</p> <p>LTE-FDD B13(10MHz) , -93.3 dBm</p> <p>LTE-FDD B14(10MHz) , -93.3 dBm</p> <p>LTE-FDD B17(10MHz) , -93.3 dBm</p> <p>LTE-FDD B18(10MHz) , -96.3 dBm</p> <p>LTE-FDD B19(10MHz) , -96.3 dBm</p> <p>LTE-FDD B20(10MHz) , -96.3 dBm</p> <p>LTE-FDD B25(10MHz) , -92.8 dBm</p> <p>LTE-FDD B26(10MHz) , -93.8 dBm</p> <p>LTE-FDD B28(10MHz) , -94.8 dBm</p>

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
5G NR-FDD n1(20MHz) (SCS:15KHz), -94 dBm
5G NR-FDD n2(20MHz) (SCS:15KHz), -92 dBm
5G NR-FDD n3(20MHz) (SCS:15KHz), -91 dBm
5G NR-FDD n5(10MHz) (SCS:15KHz), -95 dBm
5G NR-FDD n7(20MHz) (SCS:15KHz), -92 dBm
5G NR-FDD n8(10MHz) (SCS:15KHz), -94 dBm
5G NR-FDD n12(10MHz) (SCS:15KHz), -94 dBm
5G NR-FDD n20(10MHz) (SCS:15KHz), -94 dBm
5G NR-FDD n25(20MHz) (SCS:15KHz), -90.5 dBm
5G NR-FDD n28(10MHz) (SCS:15KHz), -96 dBm
5G NR-TDD n38(20MHz) (SCS:30KHz), -94 dBm
5G NR-TDD n40(20MHz) (SCS:30KHz), -94 dBm
5G NR-TDD n41(20MHz) (SCS:30KHz), -92 dBm
5G NR-TDD n66(20MHz) (SCS:15KHz), -93.5 dBm
5G NR-TDD n71(10MHz) (SCS:15KHz), -94 dBm
5G NR-TDD n77(20MHz) (SCS:30KHz), -92.9 dBm
5G NR-TDD n78(20MHz) (SCS:30KHz), -92.9 dBm
5G NR-TDD n79(40MHz) (SCS:30KHz), -89.7 dBm

### 3G/4G/5G

#### Transmitting Power

- ◆ Class 3 (24dBm+1/-3dB) for WCDMA bands.
- ◆ Class 3 (23dBm±2dB) for LTE-FDD bands.
- ◆ Class 3 (23dBm±2dB) for LTE-TDD bands.
- ◆ Class 3 (23dBm±2dB) for 5G NR bands.
- ◆ Class 2 (26dBm±2dB) for LTE B38/B40/B41/B42 bands.
- ◆ Class 2 (26dBm±2dB) for 5G NR n41/n77/n78/n79 bands .

#### Antennas

8 \* 4G/5G internal antenna,4\*4 MIMO, with 50 Ω impedance.

#### SIM card

Supports 1\* SIM slots, 1.8V / 3V . Or 1\* eSIM card. ( **Optional** )

#### Working Mode

3G/4G Wireless router mode Standard router mode

#### System Support

Windows/linux/Mac/Android

## **Hardware feature:**

<b>CPU</b>	Qualcomm SDX55, ARM A7
<b>MEMORY</b>	NAND FLASH 4Gb, LPDDR4X 4Gb
<b>Hardware interface</b>	2* LAN gigabit Ethernet ports. 1*USB2.0 port,1*RJ11 VOLTE ( <b>Optional</b> )
<b>Watchdog</b>	Built-in watchdog feature.
<b>Key button</b>	Reset, WPS
<b>Protection level</b>	Ethernet port , Contact electric shock, +/-4KV, air discharge: +/-8KV.
<b>LED status indicator</b>	5G,4G,WIFI
<b>Power Supply</b>	Power supply input. DC 12V/1.5A
<b>Peak current</b>	Max current. 2.5A @12V
<b>Working current</b>	Max 280 mA, 3.36W @12 V
<b>Power Consumption</b>	<b>Idle.</b> 120mA, 1.44W @12 V <b>Data link.</b> Max 280 mA, 3.36W @12 V <b>Peak.</b> Max 470mA , 5.64W @12V
<b>Temperature</b>	Operating Temperature 0 °C ~+50°C, Storage Temperature -10~+55°C
<b>Environment</b>	5%~95% , no condensation.
<b>Ingress Protection</b>	IP30
<b>Housing</b>	ABS plastic material, white shell.
<b>Dimensions</b>	112mm * 195mm * 106mm
<b>Installations</b>	Desktop placement
<b>Weight</b>	320g

## **Wi-Fi 6:**

<b>WLAN</b>	◆ IEEE 802.11 A/B/G/N/AC/AX, AX1800 . Max bandwidth 1774.5Mbps ◆ 2.4 GHz WLAN. 2.400–2.4835 GHz, 5 GHz WLAN. 5.150–5.850 GHz, BT5.1. 2.402–2.480 GHz ( <b>Optional</b> )
<b>Wireless Mode</b>	Access Point (AP), Client
<b>Wireless Security</b>	Supports WPA, WPA3,WPAI, WEP, TKIP encryption.

<b>Transmission Data Rates</b>	<ul style="list-style-type: none"> <li>◆ 802.11a: 6 Mbps, 9 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps</li> <li>◆ 802.11b: 1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps</li> <li>◆ 802.11g: 6 Mbps, 9 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps</li> <li>◆ 802.11n: HT20 (MCS0-7), HT40 (MCS8-15) ◆ 802.11ac: VHT20 (MCS0-8), VHT40 (MCS0-9), VHT80 (MCS0-9)</li> <li>◆ 802.11ax: HE20 (MCS0-11), HE40 (MCS0-11), HE80 (MCS0-11)</li> </ul>
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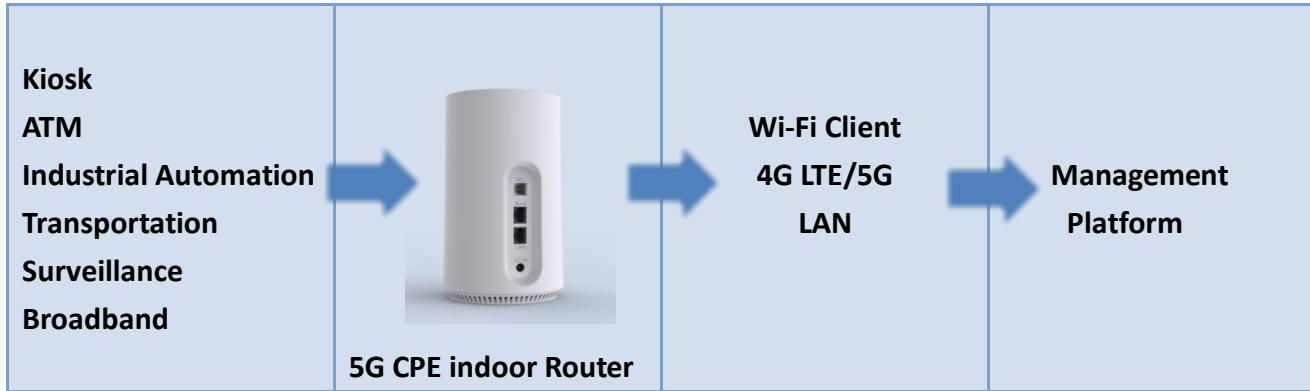
<b>WIFI transmit power</b>	<p><b>2.4 GHz</b></p> <p>802.11b @ 11 Mbps: 20 dBm</p> <p>802.11g @ 54 Mbps: 17 dBm</p> <p>802.11n, HT20 @ MCS7: 16 dBm</p> <p>802.11n, HT40 @ MCS7: 16 dBm</p> <p>802.11ax, HE20 @ MCS11: 13 dBm</p> <p>802.11ax, HE40 @ MCS11: 13 dBm</p> <p><b>5 GHz</b></p> <p>802.11a @ 54 Mbps: 15.5 dBm</p> <p>802.11n, HT20 @ MCS7: 15 dBm</p> <p>802.11n, HT40 @ MCS7: 15 dBm</p>
<b>WIFI Modulation</b>	BPSK, QPSK, CCK, 16QAM, 64QAM, 256QAM, 1024QAM
<b>WIFI Rx Sensitivity</b>	<ul style="list-style-type: none"> <li>◆ 802.11ac/1SS MCS9_40: -64.5dBm ( 2GHz)</li> <li>◆ 802.11ax/1SS MCS11_40: -64dBm ( 2GHz)</li> <li>◆ 802.11ac/2SS MCS9_40: -62.5dBm ( 2GHz)</li> <li>◆ 802.11ax/2SS MCS11_40 : -61.5dBm ( 2GHz)</li> <li>◆ 802.11ac/1SS MCS9_80: -62dBm ( 5GHz)</li> <li>◆ 802.11ax/1SS MCS11_80: -61dBm ( 5GHz)</li> </ul>
<b>Antennas</b>	2*2 MIMO internal antenna, with 50 Ω impedance.
<b>WIFI hotspot sharing</b>	Supports more than 32 users to share WIFI access to the Internet.

### **Software feature:**

<b>Parameter settings</b>	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,
<b>Dial method</b>	After the device is powered on, the system automatically dials up to connect to the network.
<b>Protocol</b>	Supports PPTP,L2TP,IPSEC VPN,TCP,UDP,DHCP,HTTP,DDNS,TR-069,HTTPS,SSH etc
<b>Routing</b>	Supports static routing, multiple routing tables.
<b>Bridge</b>	Supports 4G/5G bridge mode feature.
<b>Multiple APN</b>	Supports multiple APN access network.
<b>System Assurance</b>	Supports system automatic detection mechanism, automatic recovery of system abnormality

<b>Data Link Assurance</b>	Built-in link maintenance and self-recovery mechanism.
<b>Firewall</b>	Support flexible access control of TCP, UDP, ICMP packets. Supports port Mapping, NAT etc feature.
<b>DDNS</b>	Supported some service providers, others can be configured manually.
<b>Firmware update</b>	Supports local WebUI and remote OTA update firmware.
<b>VLAN</b>	Supports VLAN feature.
<b>Embedded system</b>	<b>OpenWRT 19.07</b>
<b>Application development</b>	Supports secondary development of application functions based on our device motherboard software.
<b><u>VPN:</u></b>	
<b>VPN Feature</b>	Supports Open VPN, IPSEC VPN, PPTP, L2TP etc VPN feature.
<b><u>MONITORING: &amp; MANAGEMENT:</u></b>	
<b>Web GUI</b>	HTTP, Firmware Upgrade
<b>Command</b>	SSHv2 ,telnet
<b>Line Interface</b>	
<b>Management platform</b>	Remote Management Platform

### **TYPICAL APPLICATION:**



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