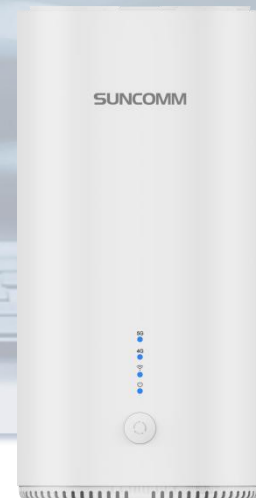**SUNCOMM**

5G CPE

S3 Ultra

Overview

1、Product Description

S3 intelligent wireless access router (CPE), developed based on a new hardware platform, can meet the increasing access needs of mobile terminals and IoT nodes, and can greatly improve the user's wireless Internet experience.

CPE is fully compatible with NSA/SA dual mode and meets the network access standards of telecom products of the Ministry of Industry and Information Technology. Provides up to gigabit-level aerial optical fiber access capabilities to meet the transmission bandwidth requirements of VR/AR/4GK/8K online video streams.

Thanks to the latest 802.1ax WiFi6 technology platform, a single CPE can cover 200 square meters of space and provide better wireless signal and network bandwidth. It provides future-proof technology, higher network efficiency, faster Wi-Fi speed, and greater coverage, providing users with a better network experience.

2、Product Features

- openwrt 21.02

- There are 1 nano-SIM card slots

- Support 5G: NR NSA 5G NR SA dual mode; 4G：LTE-TDD，LTE-FDD; Support ordinary broadband access to the Internet

- Provides 1 x 10/100M/1000/2500M Ethernet (WAN) interface

- Provides two 10/100M/1000M adaptive Ethernet (LAN) interfaces with support for auto MDI/MDIX

- It supports 2.4G and 5G dual-band bands, and supports automatic adjustment of wireless transmission rates

- It supports 64/128-bit WEP encryption, WPA-PSK, WPA2-PSK, WPA/WPA2-PSK, WPA3-SAE, WPA2-PSK/WPA3-SAE encryption and security mechanisms, which can ensure the security of data transmitted in the wireless network

- Built-in Network Address Translation(NAT)function

- SUPPORT WEB SOFTWARE UPGRADES

- Support web management, easy installation wizard

- The trunk function is supported

- DMZ is supported

- Client management functions are supported

- Support wired network and mobile network switching

Features

5G NR Qualcomm™SDX75 modem

WiFi6 AX3000

2.5 Gigabit Port
High-speed interface

MESH Support Mesh networking

Application scenarios

Home office

Meeting

Shopping

Game

Product Specifications

Model	S3
5G Module	RM551E-GL
CPU	MT7981BA+MT7976CN+MT7531AE（Dual-core A53 1.3GHz)
WiFi Frequency	2.4G / 5G
Storage	256MB DDR3 + 128MB SPI NAND FLASH
WiFi Standard	IEEE 802.11b、g、a、n、ac、ax IEEE 802.3、3u、3x
WiFi	2.4GHz 2TR :Up to 574Mbps , 5GHz 2T2R :Up to 2402Mbps
5G NR	3GPP Release 17NSA/SA operation, Sub-6 GHz
5G Network Mode	NSA/SA
5G/4G Data Rates	5G SA Transmission Speed:2.1Gbps/900Mbps (up to ISPs) 5G NSA Transmission Speed:2.5Gbps/650Mbps (up to ISPs) LTE： Down 1.0 Gbps；UP 200 Mbps
5G/4G Frequency Bands	NR 5G NSA：n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78, n79 NR 5G SA：n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78, n79 LTE-FDD：B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B66, B71 LTE-TDD：B34, B38, B39, B40, B41, B42, B43, B48 LAA：B46 UTMS/WCDMA：B1, B2, B4, B5, B8, B19
Working mode	AP / Router / Repeater
Wireless security	Wireless MAC address filtering 64/128 bit WEP encryption WPA-PSK、WPA2-PSK、WPA3-SAE、WPA/WPA2-PSK 、WPA2-PSK/WPA3-SAE WPS（PBC)
Other features	Wireless host status display Wireless site scanning Seamless roaming between nodes Seamless roaming between bands
Interface	1 x 10/100M/1000M WAN port, support Auto MDI/MDIX 2 x 10/100M/1000M LAN ports, support Auto MDI/MDIX 1 Nano SIM card slots,
WiFi settings	WiFi basic settings (dual-band integration, switch, wireless mode, SSID, PWD, encryption algorithm, channel, bandwidth, power adjustment). Advanced settings (wireless client isolation, 802.11h, WMM multimedia acceleration).

	Multiple SSIDs (SSIDs, encryption methods, PWDs, and encryption algorithms)
Network status	Register network information: Click to directly configure APN dialing information Network Scan Information: Click each to scan the network signal quality of the current location and provide optimal location detection System status view: device information (power-on duration, system time, software version, hardware version), 4/5G dial-up information,LAN status, WIFI information, IPv6 information, and Mesh node information Mesh node information: Mesh networking node information and Mesh networking tutorial tips Client information: You can directly pull a client into the blacklist Wifi information: You can directly jump to configure WiFi information Real-time Internet access rate display, WAN IP address display,software version information
Button	Power (power on/off). Reset (press and hold for 5 seconds).
LED Indicator	5G, 4G, WIFI signal indicator, internet indicator
Antenna	5dBi Gain non-detachable antenna
Number of antenas	4X5G NR and 4GLTE antenas, 5XAP antennas
Power supply	Type-C 5V/3A 8*18650 battery
USB	USB2.0 5V/2A Power out
Wireless features	Wireless on/off
Basic functions	SSID Broadcast Enable/0ff Channel selection:1~13(2.4G)　36~165(5GHz) 2.4G bandwidth:20MHz，40MHz 5G bandwidth:20MHz，40MHz，80MHz，160MHz
2.4G frequency	2412~2472MHz
5G frequency	5180~5825MHz
Power	2.4G Actual Power： 802.11b 22±1.5dBm 802.11g 21±1.5dBm 802.11n20 19±1.5dBm 802.11n40 19±1.5dBm 802.11ac40 17.5±1.5dBm 802.11ax40 17.5±1.5dBm 5G Actual Power： 802.11a 19±1.5dBm 802.11n20 18.5±1.5dBm 802.11n40 18.5±1.5dBm 802.11ac80 17.5±1.5dBm 802.11ax80 16.5±1.5dBm

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Network settings	Data Switch, Roaming Switch, Mode Selection, Default APN Information, and APN Manual Configuration FAILOVER switches: PPPOE, DHCP, and static 4G/5G band locking
WiFi settings	Wifi name and password, wifi timing, channel bandwidth setting, power regulation, bridging function, OFDMA, Mesh
SMS feature	SMS sending and receiving, SMS center settings
Guest network	Configure the SSID, rate limit, and startup time limit of the guest network
Parental controls	Online device display, online time, restricted Internet time period, URL filtering configuration
Advanced settings	Working Mode, SIM PIN, Mobile Data Switch, Bandwidth Control, Sleep Mode, LED Control, Filter MAC Address, Firewall, Static Routing, DDNS, Virtual Server, DMZ Host, UPnP, TR069 Settings
System settings	System Status, Time Setting, Password Management, Configuration Management, Firmware Upgrade, Scheduled Restart, System Log, LAN Setting, DHCP Binding, Reboot & Reset, Remote Management
Use environmentv	Operating temperature: -20°C to 50°C Storage temperature: -40°C to 70°C Operating humidity: 10% to 90% RH non-condensing Storage humidity: 5% to 95% RH non-condensing
eSIM	Optional
SIM Card	1 nano-Sim Card slot

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