SUNCOMM

4G CPE

SE3000K

802.11AX WiFi6 3000M Wireless Router

Overview

The SE3000K is a high-performance enterprise-grade WiFi6 router that supports 802.11ax technology. It operates in the 2.4GHz and 5.8GHz wireless frequency bands, meeting the demand for simultaneous high-speed wireless internet access for up to 128 users. With gigabit network interfaces, it can achieve a maximum wireless access speed of 573.5Mbps in 2.4GHz 802.11ax mode and 2402Mbps in 5.8GHz 802.11ax mode, resulting in a total wireless speed of up to 2976Mbps.

This router is characterized by its high performance, high gain, high receiver sensitivity, high bandwidth, low latency, high density, and high user capacity. It not only covers a larger area but also provides higher wireless transmission performance and stability. With its stylish design, easy installation, and support for MESH self-organizing network and relay functions, it can quickly expand wireless coverage. This makes it the perfect choice for wireless access in high-density, high-bandwidth environments such as homes, shops, restaurants, and enterprises.

Features

1) Based on carrier-standard hardware design, the product's ability to resist electromagnetic interference complies with the requirements of YD/T968-2010 'Telecommunication Terminal Equipment Electromagnetic Compatibility Requirements and Measurement Methods.' The overvoltage and overcurrent protection meet the requirements of YD/T 993-2006 'Telecommunication Terminal Equipment Lightning Protection Technical Requirements and Experimental Methods' for analog lightning impact, power line induction, power line contact, etc., with a protective capacity of 6KV common mode and 1.5KV differential mode. The surge protection capability meets the requirements of YD/T1082-2011 'Access Network Equipment Overvoltage and Overcurrent Protection and Basic Environmental Adaptability Technical Requirements and Test Methods.' The enhanced heat sink and optimized airflow ensure that the product can operate smoothly even in hot summer days, guaranteeing real-time, long-term, stable, and efficient transmission of network data to enhance user experience.
2) Supports the 802.11AX protocol, providing wireless access speeds of 573.5Mbps in 2.4GHz and 2402Mbps in 5GHz, with a total wireless access speed of 3000Mbps.
3) Equipped with an external professional WiFi6 MIMO RF chip to ensure wider signal coverage, higher rates, and longer transmission range.
4) Supports HNAT hardware fast forwarding, with bidirectional forwarding performance of up to 2Gbps on the WAN port.
5) Features MU-MIMO, OFDMA, BSS Color, high data rates, improved coverage, and low latency, providing better wireless network performance and user experience in high-density network environments with numerous connected devices.
6) 5G supports 160MHz channel bandwidth, significantly expanding user capacity, supporting up to 128 users.
7) Offers a variety of network functions including router mode, bridge mode, IPv4/IPv6, IPTV, relay, MESH, DDNS, VPN client, port mapping/DMZ, traffic control, etc., to easily handle various complex network scenarios.
8) Provides security protection through features such as WPS, WPA/WPA2/WPA3, SSID hiding, guest network, MAC/IP filtering, URL control, and DDoS attack prevention, ensuring the security of user data.
9) Built-in quick setup wizard, no professional knowledge required, easily connect to the router's WiFi for internet access.
10) Continuous product updates, feature enhancements, and performance optimization to adapt to various network environments and enhance user experience.

Appearance

Application scenarios

mobile office

Meeting

shopping

game

Hardware configuration

Model	SE3000K
Main Chip	MT7981B+MT7976+MT7531 High-performance enterprise-level chip
Frequency	ARM dual-core 1.3GHz
Memory	512MB
Flash	128MB
Indicators	Status indicators
Antennas	- External 2.4G 5dBi rubber rod antennas * 2 - External 5G 5dBi rubber rod antennas * 4
Buttons	- Reset button for factory reset (long press for 6 seconds to reset) - WPS button for easy password-free connection
Wireless Technology	- 2.4G WiFi 2*2 802.11b/g/n/ax (theoretical maximum speed up to 574Mbps) - 5.8G WiFi 3*3 802.11a/n/ac/ax (theoretical maximum speed up to 2402Mbps) - 1024QAM high-speed access rate, OFDMA high-density user access - OFDMA/MU-MIMO uplink/downlink - BSS Color spatial reuse - Space-time block code (STBC), low-density parity check (LDPC), beamforming TX/RX for uplink and downlink Power-saving features: single antenna standby technology, dynamic MIMO power-saving technology, enhanced automatic power-saving transmission technology, packet-by-packet power control technology, etc.
Device Interfaces	- WAN*1/LAN*3 10/100/1000Mbps adaptive - DC power interface compatible with power plug with outer diameter of 5.5mm, inner diameter of 2.1mm, and length above 9.5mm
Power	DC 12V/1A, positive outer and negative inner
Operating/Storage Temperature	-10℃ ~ 45℃/-20℃ ~ 70℃
Operating/Storage Humidity	10% to 90% (non-condensing) / 5% to 90% (non-condensing)
Dimensions	208.6*129.5*40.6mm(excluding antennas)
Weight	Approximately 680g
WiFi Frequency Range	2.4G: 2.4~2.4835GHz 5G: UNII-1: 5.15~5.35GHz UNII-2: 5.47~5.725GHz UNII-3: 5.725~5.825GHz
WiFi Channel	2.4G: 1、2、3、4、5、6、7、8、9、10、11、12、13 5G: 36、40、44、48、52、60、64、149、153、157、161、165
WiFi Transmission Rate	11b up 11Mbps, 11g up 54Mbps, 11n up 300Mbps 11ac up 864.7Mbps, 11ax 2.4G up 573.5Mbps, 11ax 5G up 2402Mbps
WiFi Transmit Power	11b: 20dBm±1.5dBm@11Mbps 11g: 20dBm±1.5dBm@54Mbps 11n(20/40MHz): 20dBm±1.5dBm@MCS7 11ac(40/80MHz): 20dBm±1.5dBm@MCS9 11ax(20/40/80/160MHz) : 20dBm±1.5dBm@MCS11

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WiFi Modulation	802.11b: DSSS (DQPSK, DBPSK, CCK) 802.11g: OFDM (BPSK, QPSK,16-QAM) 802.11n: OFDM (BPSK, QPSK,16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK,64-QAM, 256-QAM) 802.11ax: OFDMA (BPSK,256-QAM, 1024-QAM)
WiFi Receiver Sensitivity	2.4G: 11b: < -119±1.5dBm @1Mbps, < -90±1.5dBm dBm@11Mbps 11g: < -96±1.5dBm@6Mbps, < -78±1.5dBm @54Mbps 11n 20MHz: < -96±1.5dBm@MCS0, < -76±1.5dBm @MCS7 11n 40MHz: < -92±1.5dBm@MCS0, < -74±1.5dBm @MCS7 11ax 20MHz: < -96±1.5dBm @MCS0, < -66±1.5dBm @MCS11 11ax 40MHz: < -94±1.5dBm @MCS0, < -63±1.5dBm @MCS11 5G: 11a: < -94±1.5dBm @6Mbps, < -78±1.5dBm @54Mbps 11n 20MHz: < -94±1.5dBm@MCS0, < -74±1.5dBm @MCS7 11n 40MHz: < -90±1.5dBm@MCS0, < -72±1.5dBm @MCS7 11ac 20MHz: < -94±1.5dBm @MCS0, < -72±1.5dBm @MCS8 11ac 40MHz: < -90±1.5dBm @MCS0, < -66±1.5dBm @MCS9 11ac 80MHz: < -88±1.5dBm @MCS0, < -62±1.5dBm @MCS9 11ax 20MHz: < -94±1.5dBm @MCS0, < -64±1.5dBm @MCS11 11ax 40MHz: < -92±1.5dBm @MCS0, < -60±1.5dBm @MCS11 11ax 80MHz: < -88±1.5dBm @MCS0, < -58±1.5dBm @MCS11 11ax 160MHz: < -84±1.5dBm @MCS0, < -56±1.5dBm @MCS11

Software Functions

Working Mode	Routing mode/Bridge mode
Number of connected users	128 Peoples
Management mode	English web remote management/support for TR069 remote management
Status	Internet\Router\WiFi\Primary Network User\Guest User\DHCP List
Features	ALG\Port Forwarding\DMZ Settings\MAC Filtering\IP Filtering\DDOS\URL Control
Management	SNTP\Change User Info\Backup & Upgrade\Restart & Reset\LED Switch\Flow Control\System Log
Wireless	-WiFi: Dual frequency in one\2.4G&5G WPS switch\2.4G&5G: Status switch\Hide SSID\SSID\Security\Encryption Mode\Password\Advanced Settings: Protocol\Channel Bandwidth\Channel\Tx power -Black and White List: Switch\Mode switch (Blacklist\Whitelist) \Blacklist -WPS: 2.4G&5G Switch\PBC -Mesh: Switch\Role (Automatic\Main route\Satellite) \Add satellite\Fast roaming\2.4G&5G Set signal strength threshold -Relay mode: Switch\Frequency band\SSID(Scan)\Security\Password\Status -Advanced Configuration: Band Streering\WLAN QOS\WiFi5 Compatibility mode\WiFi timed reboot
Setup Wizard	WiFi-Network Configuration-Summary
Mesh Topo	Overall network device topology(IP\MAC\Medium)
Network	Ethernet：Network (Routing\Bridge) \Ethernet Setting (Dynamic IP\Static IP\PPPoE)\Ethernet Status LAN Setup: Lan: IP Address\Subnet Mask\DHCP setting\DNS\Lease timeGuest Network Address Pool
Network Advanced	IPV6\DDNS\IPTV\Guest Network\Parental Control\VPN Client(PPTP\L2TP)\Hardware HNAT

Network Connection Diagram

What's in the package?

- WR3000K*1
- DC 12V/1A power adapter*1
- Ethernet cable*1
- user manual

Product dimension diagram(mm)
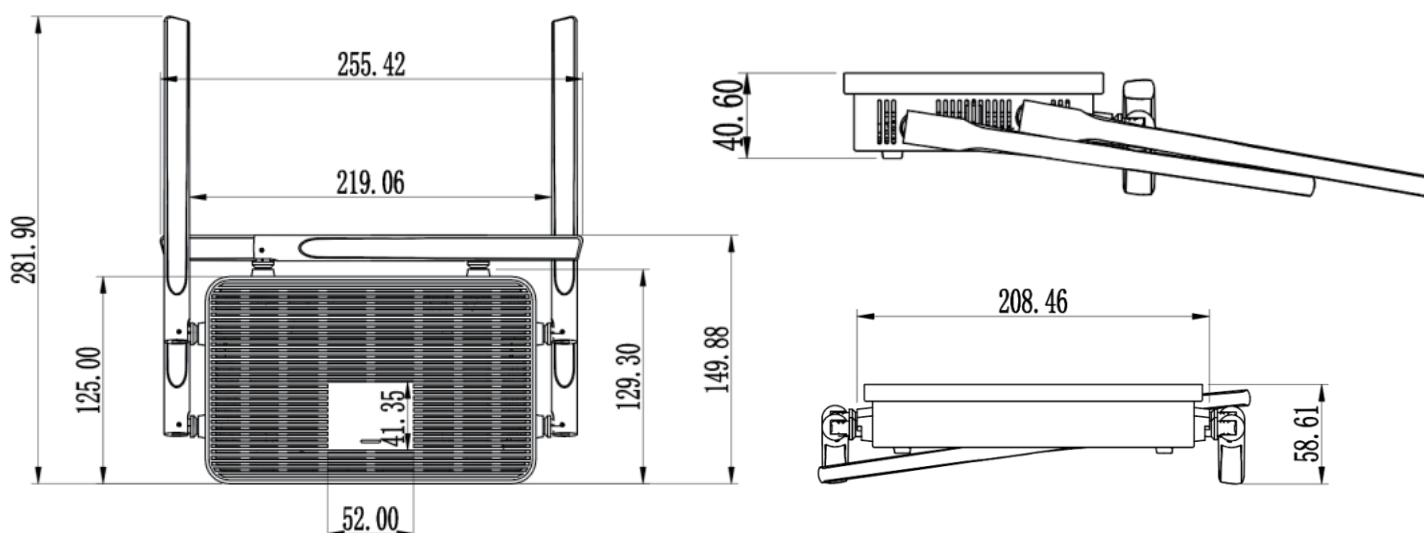
Maximum wireless signal range derived from IEEE standard 802.11 specifications. Actual data throughput and data over distance will vary. Network conditions and environmental factors, including volume of network traffic, building material and construction, and network overhead, result in lower actual data throughput rate and wireless coverage.