# HSGQ-R3000



# **Product Description**

HSGQ-R3000 uses the next generation 11ax technology, wireless speed up to 3000Mbps, support MU-MIMO; The 2.4GHz band transmits far, easily penetrates the wall, and has wide Wi-Fi signal coverage. The 5GHz band has less interference and smooth channels. Improve the effciency of multi-user concurrent scenarios and easily cope with high-density access scenarios.

## **Hardware Specifications**

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Core Parameters	CPU	MT7	981BA(ARM Dual-core A53@1.3GHz)+MT7976CN		
	Flash/Memory	NAND 128MB+256MB DDR3			
	Antenna	2.4G: 5dBi×3 5.8G: 5dBi×3			
	Interface	1×10	1×10/100/1000Mbps RJ45 WAN		
		3×10	0/100/1000Mbps RJ45 LAN		
	Buttons	RES	RESET, WPS/MESH		
	Power Supply	DC 12V 1A			
	LED Indicator	LED	×1(three colors, red, green, blue)		
	Standards	IEEE	IEEE 802.11ax/ac/n/a 5 GHz		
		IEEE	IEEE 802.11ax/n/b/g 2.4 GHz		
	Operating Frequency	2.4~2.4835GHz,			
		5.150GHz ~ 5.850GHz			
	Data Rate	Up to 3000Mbps			
	Channel	2.4G: 1~13			
		5.8G	5.8G: 36,40,44,48,52,56,60,64,149,153,157,161,165		
	Modulations	802.11a: OFDM (BPSK,QPSK,16-QAM,64-QAM)			
		802.11b: DSSS (DQPSK, DBPSK, CCK)			
		802.11g: OFDM (BPSK, QPSK,16-QAM, 64-QAM)			
		802.11n: OFDM (BPSK, QPSK,16-QAM, 64-QAM)			
		802.11ac: OFDM (BPSK, QPSK,16-QAM, 64-QAM, 256-QAM)			
	Encryption	802.11ax: OFDM (BPSK, QPSK,16-QAM, 64-QAM, 256-QAM,1024-QAM)			
		WPA-PSK/WPA2-PSK, WPA3-SAE, WPA3-SAE/WPA2-PSK2			
Wireless			11b(CCK): 22dBm±2dBm@11Mbps		
Features	Transmit		11g(OFDM): 22dBm±2dBm@6Mbps; 19dBm±2dBm@54Mbps		
		2.4G	11n(HT40): 22dBm±2dBm@MCS0; 19dBm±2dBm@MCS7		
			11AX(HE40): 22dBm±2dBm@MCS0; 17dBm±2dBm@MCS11		
		5.8G	11a(BW20): 22dBm±2dBm@6Mbps; 19dBm±2dBm@54Mbps		
			11a(HT40): 22dBm±2dBm@6Mbps; 19dBm±2dBm@54Mbps		
			11ac(VHT80): 22dBm±2dBm@MCS0; 18dBm±2dBm@MCS9		
			11ac(VHT160): 22dBm±2dBm@MCS0; 18dBm±2dBm@MCS9		
			11AX(HE80): 22dBm±2dBm@MCS0; 17dBm±2dBm@MCS11		
			11AX(HE160): 22dBm±2dBm@MCS0; 16.5dBm±2dBm@MCS11		
	Receive Sensitivity	2.4G	11g: <-95dbm@ 6Mbps;<-77dbm@ 54Mbps		
			11n (HT40): ≤ -96dBm@MCS0,≤ -65dBm@MCS11		
			11ac (VHT40): ≤ -96dBm@MCS0,≤ -65dBm@MCS11		
			11ax (HE40): ≤ -96dBm@MCS0,≤ -65dBm@MCS11		
		5.8G	11a (BW20): ≤ -94dBm@6Mbps; ≤ -77dBm@54Mbps		
			11ac (VHT80): ≤ -88dBm@MCS0; ≤ -64dBm@MCS9		
			11ac (VHT160): ≤ -85dBm@MCS0; ≤ -60dBm@MCS9		
			11ax: (HE80):≤ -88dBm@MCS0; ≤ -57dBm@MCS11		

# **Ordering Information**

Product Model	Description	
	1×GE WAN	
HSGQ-R3000	3×GE LAN	
113GQ-K3000	2.4GHz: 300Mbps	
	5.8GHz: 866Mbps	

## Hardware Specifications

Hardware Specifications					
Setup Wizard		Quickly configure router access mode and wireless parameters			
Status	Router	Display CPU and memory utilization, software version, system running time			
	WiFi	Display wifi ssid, wireless protocol, bandwidth, channel			
	Online Users	List of main network users			
		List of guest users			
Network	WAN	Type of Connection: Dynamic IP, PPPoE, Static IP			
		DNS: Dynamic, Manual			
		Status: Type of connection, Status of connection			
	LAN	Setting IP address			
		DHCP			
Security	ALG	Enable FTP, RSTP, SIP, PPTP Pass Through, L2TP Pass Through, IPSEC Pass Through			
	Port Mapping	DHCP Setting			
	DMZ	Enter the IP address of the internal computer that you want to designate as the DMZ host			
		Apply			
	MAC Filter	The blacklist denies the selected MAC address from connecting to the network			
	IP Filter	Set the site to disable user access acccording IP			
	DDOS	Enable the network attack prevention function.			
	WiFi Setting	Enable, SSID, Password, Protocol, Bandwidth, Channel, Hide			
Wireless	White-Black list	Add, delete and Remove the white-black list			
	WPS	Enable/Disable			
MESH	Mesh	Easy mesh			
	IPv6	Type of Connection: Dynamic IP, PPPoE, Static IP, Repeater Mode			
Advanced Network	IPTV	Enable/Disable, VLAN ID			
	Parental Control	Display the time period when the terminal's MAC address is used to access the external network. You can configure the switch, device name, MAC address, access time, description, status, etc.			
Settings	VPN Clients	PPTP VPN			
		L2TP VPN			
	SNTP	Enable auto-sync with network time			
Management	Password	Change the password of web			
	Bankup& Update	Download the backed up configuration and upload the backed up configuration			
	Reboot&Reset	Includes immediate restart and scheduled restart			
	Syslog	The log of system operating			

# **Key Feature**

- Dual frequency 3000Mbps, WiFi6+, HE160MHz, Meet the demand for
- Dual-core ARM architecture CPU with 256MB large memory, faster
- · External 6 antennas, precision layout, wider coverage, longer transmission distance WAN, LAN port full gigabit, support gigabit fiber broadband access, IPTV access
- Support Mesh, 360° network full coverage without dead corners
- Support IPV6 large capacity, high efficiency, and greater security
- Support guest network and device management functions, easily control your network
- Supports multiple security mechanisms such as blacklist, MAC address filtering, IP address filtering, SSID hiding/encryption, and layer upon layer protection

For more information, please visit: http://www.hsgq.com

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11AX(HE160):≤ -85dBm@MCS0; ≤ -54dBm@MCS11

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