

RG-WS6008

High-Performance Wireless Controller Datasheet

Ruijie RG-WS6008 High-Performance Wireless Controller is designed to support the next-generation high-speed wireless network. The RG-WS6008 Wireless Controller can be deployed at either Layer 2 or Layer 3 network to communicate with access point (AP) without any architecture or hardware changes, offering seamless and secure wireless control. The RG-WS6008 Wireless Controller can manage up to 32 wireless APs by default and a maximum capacity of 200 APs (or maximum 400 APs License for Wall AP) with license upgrade.

HIGHLIGHTS

- Scalable up to 200 APs or 400 Wall APs
- Full Resiliency Design
- Intelligent Load Balancing
- Rich Authentication Features

The RG-WS6008 Wireless Controller enables centralized control and management of APs, delivering high transparency and visibility. With Ruijie's leading management platform Smart Network Commander (RG-SNC) and AP series, the RG-WS6008 Wireless Controller can flexibly manage AP configuration and optimize radio frequency (RF) coverage to enhance the wireless network performance and minimize deployment workload at the same time.

The RG-WS6008 Wireless Controller enables role-based network services with cutting-edge security and clustering technologies. The clustering technology shares wireless user database among multiple controllers and allows users to roam seamlessly across different areas within the network. The RG-WS6008 Wireless Controller thereby delivers smooth wireless voice communications with superior security and availability.

PRODUCT FEATURES

Smart Wireless Experience

Fair Scheduling

The RG-WS6008 Wireless Controller cooperates with Ruijie APs to offer equal access time for smart devices running different standards such as 802.11g, 802.11n, 802.11ac, etc. The feature solves the problems such as high latency and low network speed caused by use of an old wireless LAN card or the device is far away from the AP. The RG-WS6008 Wireless Controller ensures a fair high-speed wireless network for all users with any devices anywhere and anytime.

Fair Scheduling

After fair scheduling is enabled, the whole channel and performance of AP is fully used. Whether low-speed or high-speed the wireless terminal is, they'll have opportunity to send packets.



Fair Scheduling Mechanism

Intelligent Identification of Smart Devices

The RG-WS6008 Wireless Controller with a built-in portal server intelligently identifies the type of smart device. According to the device features, the wireless controller adaptively presents a portal authentication page in the corresponding size and page layout. The intelligent identification of smart devices eliminates the trouble of screen size adjustment and offers better wireless user experience. This technology supports all mainstream operating systems including Apple iOS, Android, and Windows.

Intelligent Load Balancing

On a high-density wireless LAN, the RG-WS6008 Wireless Controller teams up with Ruijie APs to intelligently distribute users among different APs according to the number of users and data traffic in real time. This feature balances the load pressure on each AP and improves the average bandwidth and Quality of Service (QoS), offering higher network availability. In addition to the role-based and traffic-based balancing features, the RG-WS6008 Wireless Controller also enables load balancing in terms of frequency range. Since the majority of WiFi devices use 2.4GHz by default while frequency above 5GHz (802.11a/n/ac) can offer better throughput performance. With the frequency-based load balancing, the Wireless Controller allows users with dual-band devices to connect to the 5GHz as first priority. Bandwidth usage is greatly increased by 30-40% with no additional cost. The RG-WS6008 Wireless Controller hence delivers the best-in-class highspeed wireless performance to the Ruijie clients.

User-based Load Sharing

Wireless users will connect to AP according to their own choose, so certain AP may have too many users and a very heavy load while other APs are idle. This is a very common problem in large-scale wireless network.

Load sharing feature enables Ruijie APs which work in the same group to realize load balance based on number of users and download bandwidth, users then will access to the non-busy APs.



Intelligent Load Balancing Mechanism

High Performance and Reliability

Centralized or Distributed Intelligent Switching

The RG-WS6008 High-Performance Wireless Controller can be deployed at Layer 2 or Layer 3 level without modifying the original network architecture as it forms an integrated switching architecture with the wireless APs. The RG-WS6008 Wireless Controller provides ease in data switching management of all APs. With the industry-leading local forwarding technology, the RG-WS6008 Wireless Controller eliminates the traffic bottleneck of traditional Wireless Controllers. The local forwarding technology allows flexible deployment of data forwarding in the AP. It means that the AP can determine whether to forward all data via the RG-WS6008 Wireless Controller, or to send the data directly to a wired network for data communication according to a Service Set ID (SSID) or user VLAN. The local forwarding technology enables large-scale, delay-sensitive, and real-time data transmission via the wired network. With the high throughput of 802.11ac, it greatly alleviates the traffic pressure on the RG-WS6008 Wireless Controller. It also better equips the RG-WS6008 Wireless Controller to accommodate the network services with heavy traffic demand such as high definition Video on Demand (VoD) and Voice over Wireless LAN (VoWLAN) in the future.

Intelligent RF Management

The RG-WS6008 Wireless Controller enables AP to perform RF scanning in a wireless network as required. The AP can scan the wireless frequency bands and channels to identify both rogue APs and networks. The AP will send alert notifications to network administrators for immediate action once such are found, providing round-the-clock network protection. In addition, the RG-WS6008 Wireless Controller can control the real-time RF scanning function of the AP to measure signal and interference intensities. The Wireless Controller software also dynamically adjusts traffic load, power, RF coverage, and channel allocation for maximized signal coverage and capacity.

Seamless Roaming Experience

The advanced clustering technology enables real-time synchronization of online information and roaming records of all users among multiple RG-WS6008 Wireless Controllers. Simply put, user and authentication data are shared in the cluster enabling wireless users to roam freely in the whole network. Users can thereby enjoy a borderless and secure roaming experience with the IP address and authentication status remained unchanged. The RG-WS6008 Wireless Controller also achieves fast roaming and voice services with the clustering technology.

Abundant QoS Policies

The RG-WS6008 Wireless Controller supports an extensive array of QoS policies. For example, the Wireless Controller can set bandwidth limitations to give higher priority to critical data transmission applications. The Wireless Controller hence delivers guaranteed bandwidth performance for network of all sizes.

Wireless IPv6 Access

The RG-WS6008 Wireless Controller fully supports all the IPv6 features and implements IPv6 forwarding on a wireless network. Both IPv4 and IPv6 users can automatically connect to the wireless controller series over tunnels, enabling IPv6 applications to be borne on the wireless network.

Flexible and Comprehensive Security Policies

Local Authentication

The RG-WS6008 Wireless Controller has a local user database, which offers smooth integration with the built-in portal server, for easy local authentication of wireless users via web authentication. The RG-WS6008 Wireless Controller allows local authentication based on the actual user demand, saving costs by getting rid of devices such as external portal and RADIUS server. The network infrastructure is also greatly simplified. The RG-WS6008 Wireless Controller fully satisfies the needs of small and medium-sized networks for secure user access.

User Data Encryption

The RG-WS6008 Wireless Controller fully supports the advanced encryption technologies such as Wired Equivalent Privacy (WEP), Temporal Key Integrity Protocol (TKIP), and Advanced Encryption Standard (AES), ensuring end-to-end security of data transmission over the wireless network.

Standard Communication Protocol

Encrypted communication between the RG-WS6008 Wireless Controller and APs is enabled with the international standard Control and Provisioning of Wireless Access Points (CAPWAP). The function ensures complete isolation from the wired network and guarantees high security for the real-time communication between the Wireless Controller and APs. CAPWAP also allows deployment of third-party access points in the future, offering superior scalability, availability and maximizes user investment at the same time.

Virtual Wireless Packet Technology

With the virtual AP technology, the RG-WS6008 Wireless Controller can partition multiple SSIDs within the network. Network administrator can separately encrypt and isolate subnets or VLANs that have the same SSID. The deployment thereby enables specified authentication mode and encryption mechanism for each SSID.

RF Security

The RG-WS6008 Wireless Controller supports RF probe scanning feature to detect unauthorized access points or other RF interference sources. Once detected, the Wireless Controller will send real-time alerts to the network management system. It delivers easy management for network administrator to monitor potential threats and usage status.

Protection Against Viruses and Attacks

The RG-WS6008 Wireless Controller provides a wide range of built-in security mechanisms to effectively prevent and control virus spread and network traffic attacks. The mechanisms ensure secure network access by the authorized users only. Such protection mechanisms include IP/MAC/WLAN binding, hardware ACL control, traffic-based bandwidth limitation, etc. The RG-WS6008 Wireless Controller is an ideal match for large campus, hospital, or enterprise networks with high security demand for guest network access.

Secure User Access

The RG-WS6008 Wireless Controller supports Web Authentication, allowing users to perform authentication using any web browser. 802.1X authentication is another security highlight. Different from web authentication, 802.1X is suitable for the area where network security is strictly controlled. In addition, 802.1x enables IP/MAC/ WLAN binding after authentication. The feature totally guarantees

the legitimacy of the user's identity. The RG-WS6008 Wireless Controller also supports Ruijie RG-SMP (Security Management Platform) to provide insight into and control of Ruijie security and network devices. The RG-SMP offers comprehensive security management across a wide range of Ruijie security appliances and allows users to manage office networks of all sizes for a wide range of industries, with security compliance requirements in aspects of user identity, host health and security of network communication.

Flexible Authentication Modes

In addition to the traditional Web Authentication and 802.1X Authentication, the Ruijie RG-WS6008 Wireless Controller also supports PEAP Authentication, SMS Authentication, and QR Code Authentication.

The PEAP Authentication allows users to perform password authentication for once only. That means users are only required to enter credentials during their first network visit.

If the SMS authentication is adopted, users first sign in with their mobile phone numbers and then receive an SMS with login username and password for network access.

QR code authentication is another wireless security highlight. After accessing a wireless network, users will obtain a QR code on their end devices and simply ask any authorized staff's to scan it for network access.



Advanced Guest Wireless Interfaces of the QR Code Authentication

Protection Against ARP Spoofing

Address Resolution Protocol (ARP) detection effectively protects network users from ARP gateway spoofing and host spoofing for secure wireless access. Automatic binding can be enabled in both dynamic and static IP address allocation environments to greatly save manpower resources and management costs. The RG-WS6008 Wireless Controller can monitor and control the rate of ARP packets transmitted to prevent malicious use of scanning tools, which triggers ARP flooding and causes network congestion.

Rogue AP Countermeasure

The RG-WS6008 Wireless Controller enables effective rogue AP detection and containment to enhance wireless security. The Wireless Controller arranges an active AP to perform rogue detection, send probe packets and hear probe responses from valid APs. Network administrator can hence easily single out rogue APs from the authorized to ensure wireless network security.



DHCP Security

With Dynamic Host Configuration Protocol (DHCP) snooping, the RG-WS6008 Wireless Controller permits DHCP response messages from the trusted ports only. The Wireless Controller can thus prevent unauthorized deployment of any DHCP server to disturb the allocation and management of IP addresses and affect normal operation of the network. With the DHCP monitoring function, the RG-WS6008 Wireless Controller can effectively prevent ARP host spoofing and source IP address spoofing in the dynamic IP allocation environment by dynamically monitoring ARP and checking source IP address.

Management Information Security

To ensure the security of devices and offer protection against attacks, the Secure Shell (SSH) and SNMPv3 technologies encrypt management information by Telnet and Simple Network Management Protocol (SNMP). The RG-WS6008 Wireless Controller offers Telnet access control based on source IP address, offering a high level of granularity on device management. Only the IP addresses authorized by network administrator can log into the Wireless Controller, which further enhances the security of device network management.

Unified Network Management

Multiple Management Protocols and Unified Management Platform

The RG-WS6008 Wireless Controller supports a vast number of management modes including Command Line. It offers centralized and efficient planning, deployment, monitoring, and management of all APs with minimized investment costs. Working with the Ruijie Smart Network Commander (SNC) which is an all-rounded network management platform, the RG-WS6008 Wireless Controller delivers enriched network management services such as topology generation, AP operation status, online user status, entire network RF planning, user location, security alert, link load, device utilization rate, roaming record and report output. These functions enable network administrator to monitor and manage the operation status of the entire network in the data center.



Ruijie SNC Unified Topology Diagram

Web Interface Management

The RG-WS6008 Wireless Controller supports web management interface for AC, which provides simplified wireless configuration and high visibility for the whole network operation. With the AC web interface, the Wireless Controller can also manage the APs and also the associated users, achieving user bandwidth control and network access restriction. Network administrator can hence plan, operate and maintain the wireless network with ease.



Ruijie Smart Web Management Interface

TECHNICAL SPECIFICATIONS

Service Port 6 1000BASE-T ports 2 1000BASE-T/1000BASE-X ports (combo) Management Port 1 console port 2 USB ports Security Standard GB4943, EN/IEC 60950-1 EMC Standard GB4943, EN/IEC 60950-1 EMC Standard GB4943, EN/IEC 60950-1 VEX Standard GB4943, EN/IEC 60950-1 VEX Standard GB4943, EN/IEC 60950-1 Maximum Number of Manageable APs 200 APs or 400 wall APs (with license upgrade) APs 2.048 Maximum Number of Manageable APs 6.400 Gients 802.11 Performance 802.11 Performance 805ps VLAN 4.094 Maximum Number of Cleints 1.500 Supported by the Built-in Portal 1.500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 550ms 802.11 LAN Protocol 802.11, 802.11b, 802.11g, 802.11d, 802.11h, 802.11h	Model		RG-WS6008
Service For 2 1000BASE-X ports (combo) Management Port 2 USB ports Security Standard GB4943, ENVICC 60950-1 EMC Standard GB254, EN001 489 Default Number of Manageable APs 32 Maximum Number of Manageable APs 200 APs or 400 wall APs (with license upgrade) Maximum Number of Manageable APs 2.048 Maximum Number of Manageable APs 6.400 B02.11 Performance 8Gbps VLAN 4.094 Maximum Number of Clients 5.500 Supported by the Built-in Portal 1.500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 850ms 802.11 LAN Protocol 802.11, 802.112, 802.111, 802.111, 802.111, 802.112, 802.111, 802.111, 802.111, 802.112, 802.111, 802.111, 802.111, 802.111, 802.112, 802.111, 802.111, 802.112, 802.113, 802.112,	Service Port		6 1000BASE-T ports
Management Port 1 console port Security Standard GB4943, EN/IEC 60950-1 EMC Standard GB49254, EN301 489 Performance 200 APs or 400 wall APs (with license upgrade) APs Maximum Number of Manageable APs 200 APs or 400 wall APs (with license upgrade) Maximum Number of Configurable APs 200 APs or 400 wall APs (with license upgrade) Maximum Number of Manageable APs 2,048 Maximum Number of Configurable APs 6,400 B02.11 Performance 8Gbps VLAN 4,094 Maximum Number of Clients Supported by the Built-in Portal 1.500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 500ms 802.11 LAN Protocol 802.11, 802.118, 802.119, 802.111,			2 1000BASE-T/1000BASE-X ports (combo)
Nume 2 USB ports Security Standard GB4943, EN/IEC 60950-1 EMC Standard GB9254, EN301 489 Default Number of Manageable APS 32 Maximum Number of Manageable APS 200 APs or 400 wall APs (with license upgrade) APs 2,048 Maximum Number of Manageable APS 2,048 B02.11 Performance 8Gbps VLN 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPvS Neighbor Table 10K Inter-AC Roaming Switch Time 450ms 802.111 LAN Protocol 802.111, 802.116, 802.116, 802.111, 802	Management Port		1 console port
Security Standard GB4943, EN/IEC 60980-1 EMC Standard GB9224, EN301 469 Per Standard 200 APs or 400 wall APs (with license upgrade) APs 200 APs or 400 wall APs (with license upgrade) APs 2.048 Maximum Number of Manageable APs 2.048 Maximum Number of Manageable Clients 6.400 802.11 Performance 8Gbps VLAN 4.094 Maximum Number of Clients 1.500 Supported by the Built-in Portal 1.500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients AP Table 12K Irve Neighbor Table 10K Inter-AC Roaming Switch Time 550ms 802.11 LAN Protocol 802.11, 802.110, 802.111, 80			2 USB ports
EMC Standard CB9254, EN301 489 Performance Maximum Number of Manageable APs APs 200 APs or 400 wall APs (with license upgrade) APs 200 APs or 400 wall APs (with license upgrade) 800 APs 2.048 2.048 Maximum Number of Manageable Clients 8.400 802.11 802.11 Performance 8Gbps 4.094 Maximum Number of Clients Supported by the Built-In Portal 1.500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Reaming Switch Time \$50ms 802.11 LAN Protocol 802.118, 802.116, 802.116, 802.116, 802.111, 802.116, 802.111, 802	Security Standard		GB4943, EN/IEC 60950-1
Performance Default Number of Manageable APs 32 Maximum Number of Manageable 200 APs or 400 wall APs (with license upgrade) APs 2.048 Maximum Number of Manageable 6,400 Clients 802.11 Performance 8Gbps VLAN 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time \$50ms 802.11 LAN Protocol 802.111, 802.110	EMC Standard		GB9254, EN301 489
WLAN Maximum Number of Manageable APs 200 APs or 400 wall APs (with license upgrade) Performance 802.11 Performance 80dps Maximum Number of Clients 6,400 802.11 Performance 80dps VLAN 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K Inter-AC Roaming Switch Time 500ms 802.11 LAN Protocol 802.11, 802.11a, 802.11a, 802.11a, 802.11b,		Default Number of Manageable APs	32
Maximum Number of Configurable APs 2,048 Maximum Number of Manageable Clients 6,400 802.11 Performance 8Gbps VLAN 4,094 Maximum Number of Clients Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 550ms 802.11 LAN Protocol 802.11, 802.118, 802.119, 802.110, 802		Maximum Number of Manageable APs	200 APs or 400 wall APs (with license upgrade)
WLAN 6,400 802.11 Performance 8Gbps VLA 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time \$50ms 802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.1h, 802.1h, 80		Maximum Number of Configurable APs	2,048
Performance 86bps VLAN 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 64K ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time s50ms 802.11 LAN Protocol 802.11k, 802.11k, 802.11g, 802.11g, 802.11d, 802.11h, 802.11e, 802.11e		Maximum Number of Manageable Clients	6,400
Performance VLAN 4,094 Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 550ms 802.11 LAN Protocol 802.11, 802.11a, 802.11a, 802.11d, 802.11h, 802.11h, 802.11h, 802.11k, 802.11h, 802.11h, 802.11k, 802.11h, 802.1h, 802.1h, 802.1h, 802.1h		802.11 Performance	8Gbps
Performance Maximum Number of Clients 1,500 Supported by the Built-in Portal 1,500 ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time 550ms 802.11 LAN Protocol 802.11, 802.11a, 802.11g, 802.11d, 802.11h, 802.1h, 802.1h, 802.11h, 802.11h, 802.1h, 802.11h, 802.1h,	-	VLAN	4,094
ACL 64K MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time ≤50ms 802.11 LAN Protocol 802.11, 802.11a, 802.11a, 802.11g, 802.11d, 802.11h, 802.11h, 802.11k, 802.11k, 802.11k, 802.11k, 802.11h, 802.11k, 802.11k, 802.11k, 802.11h, 802.11a, 802.11g, 802.11h, 802.11h, 802.11h, 802.11k, 802.11h, 802.11k, 802.11h, 802.1h, 802	Performance	Maximum Number of Clients Supported by the Built-in Portal	1,500
WLAN MAC Address Table 16K Local Authentication 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time ≤50ms 802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.11n, 802.11w, 802.11r, 802.11n, 802.11w, 802.11r, 802.11n, 802.11w, 802.11w, 802.11r, 802.11n, 802.11w, 802.11r, 802.11n, 802.11m, 802.11w, 802.11r, 802.11n, 802.11m, 802.11w, 802.11w, 802.11r, 802.11m, 802.11m, 802.11m, 802.11w, 802.11w		ACL	64K
Understand 300 wireless clients ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time \$50ms 802.11 LAN Protocol 802.11, 802.11a, 802.11g, 802.11d, 802.11h, 802.1h, 802.1h		MAC Address Table	16K
ARP Table 12K IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time \$50ms 802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.11h, 802.11h, 802.11r, 802.11n, 802.11r, 802.11n, 802.11n, 802.11r, 802.11r, 802.11n, 802.11r, 802.11r, 802.11r, 802.11r, 802.11n, 802.11r, 802.11r, 802.11r, 802.11n, 802.11r, 8		Local Authentication	300 wireless clients
IPv6 Neighbor Table 10K Inter-AC Roaming Switch Time ≤50ms 802.11 LAN Protocol 802.11, 802.11a, 802.11a, 802.11a, 802.11a, 802.11h, 802.		ARP Table	12K
Inter-AC Roaming Switch Time ±50ms 802.11 LAN Protocol 802.11, 802.11a, 802.11a, 802.11d, 802.11h, 802.11k, 802.11r, 802.11r, 802.11a, 802.11n, 802.11k, 802.11r, 802.11r, 802.11n, 802.11n Layer 2/Layer 3 network topology between an AP and AC Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming under local forwarding Intra-AC Layer 2/Layer 3 roaming under local forwarding Intra-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding User-based bandwidth control User-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation AP-based user isolation		IPv6 Neighbor Table	10K
802.11 LAN Protocol 802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.11w, 802.11k, 802.11r, 802.11i, 802.11i, 802.11n Layer 2/Layer 3 network topology between an AP and AC Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 3 roaming under local forwarding Forwarding Wireless QoS Wireless QoS Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing AC-based user isolation WI AN-based user isolation		Inter-AC Roaming Switch Time	≤50ms
WLAN 802.11w, 802.11k, 802.11r, 802.11i, 802.11e, 802.11n Layer 2/Layer 3 network topology between an AP and AC Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC Network Address Translation (NAT) traversal Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming under local forwarding Intra-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Centralized forwarding Forwarding Centralized forwarding Wireless QoS WLAN-based bandwidth control User Isolation VLAN-based user isolation		802 11 LAN Protocol	802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h,
WLAN CAPWAP Layer 2/Layer 3 network topology between an AP and AC Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC Enable an AP to automatically download configurations from an AC WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Centralized forwarding Centralized forwarding Wireless QoS Plexible forwarding based on service Wireless QoS AP-based bandwidth control User Isolation AC-based user isolation WI AN-based user isolation AP-based user isolation			802.11w, 802.11k, 802.11r, 802.11i, 802.11e, 802.11n
WLAN Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC Enable an AP to automatically download configurations from an AC Enable an AP to automatically download configurations from an AC Network Address Translation (NAT) traversal Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Centralized forwarding Forwarding Centralized forwarding Wireless QoS AP-based bandwidth control Wser Isolation WI-AN-based static and smart speed control Fair balancing AC-based user isolation AP-based user isolation AP-based user isolation			Layer 2/Layer 3 network topology between an AP and AC
WLAN Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming under local forwarding Intra-AC Layer 2/Layer 3 roaming under local forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service Wireless QoS AP-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation WI AN-based user isolation		CAPWAP	Enable an AP to automatically discover an accessible AC
WLAN CAPWAP an AC WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Intra-AC Layer 2/Layer 3 roaming Forwarding Centralized forwarding Forwarding Centralized forwarding Wireless QoS AP-based bandwidth control Wser Isolation AC-based user isolation Wi AN-based user isolation Wi AN-based user isolation			Enable an AP to automatically upgrade software version from
WLAN Enable an AP to automatically download configurations from an AC Network Address Translation (NAT) traversal WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service Wireless QoS AP-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation WI AN-based user isolation			an AC
WLAN an AC Roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Centralized forwarding Forwarding Centralized forwarding Flexible forwarding Flexible forwarding based on service AP-based bandwidth control WLAN-based bandwidth control Wireless QoS WLAN-based bandwidth control User Isolation AC-based user isolation AP-based user isolation AP-based user isolation			Enable an AP to automatically download configurations from
WLAN Roaming Intra-AC Layer 2/Layer 3 roaming Inter-AC Layer 2/Layer 3 roaming under local forwarding Intra-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service Wireless QoS AP-based bandwidth control User Isolation AC-based user isolation Muser Isolation AP-based user isolation			an AC
WLAN Roaming Intra-AC Layer 2/Layer 3 roaming WLAN Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service AP-based bandwidth control Wireless QoS WLAN-based bandwidth control User Isolation AC-based user isolation AP-based user isolation AP-based user isolation			Network Address Translation (NAT) traversal
WLAN Roaming Inter-AC Layer 2/Layer 3 roaming WLAN Intra-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service AP-based bandwidth control Wireless QoS WLAN-based bandwidth control User Isolation AC-based user isolation VI AN-based user isolation WI AN-based user isolation		Roaming	Intra-AC Layer 2/Layer 3 roaming
WLAN Intra-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Local forwarding Forwarding Centralized forwarding Forwarding Centralized forwarding Forwarding Flexible forwarding based on service AP-based bandwidth control WLAN-based bandwidth control Wireless QoS WLAN-based bandwidth control User lsolation AC-based user isolation AP-based user isolation AP-based user isolation			Inter-AC Layer 2/Layer 3 roaming
Inter-AC Layer 2/Layer 3 roaming under local forwarding Forwarding Local forwarding Forwarding Centralized forwarding Flexible forwarding based on service AP-based bandwidth control Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation WI AN-based user isolation WI AN-based user isolation	WLAN		Intra-AC Layer 2/Layer 3 roaming under local forwarding
Forwarding Centralized forwarding Forwarding Centralized forwarding Flexible forwarding based on service AP-based bandwidth control Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing AC-based user isolation AP-based user isolation WI AN-based user isolation WI AN-based user isolation			Inter-AC Layer 2/Layer 3 roaming under local forwarding
Forwarding Centralized forwarding Forwarding Flexible forwarding based on service AP-based bandwidth control WLAN-based bandwidth control Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing Vulser Isolation AC-based user isolation WI AN-based user isolation WI AN-based user isolation		Forwarding	Local forwarding
Flexible forwarding based on service AP-based bandwidth control Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation WI AN-based user isolation			Centralized forwarding
Wireless QoS WLAN-based bandwidth control Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AC-based user isolation WI AN-based user isolation WI AN-based user isolation			Flexible forwarding based on service
Wireless QoS WLAN-based bandwidth control User-based static and smart speed control Fair balancing User Isolation AP-based user isolation WLAN-based user isolation		Wireless QoS	AP-based bandwidth control
User Isolation WI AN-based user isolation			WLAN-based bandwidth control
Fair balancing AC-based user isolation User Isolation WI AN-based user isolation			User-based static and smart speed control
User Isolation AP-based user isolation WI AN-based user isolation		User Isolation	Fair balancing
WI AN-based user isolation			AP-based user isolation
			WI AN-based user isolation

Model		RG-WS6008
		Fast switching between 2 ACs
		Multiple ACs redundancy (1:1 A/A and A/S, N:1)
	Reliability	Multiple ACs clustering (N:N)
		Remote Intelligent Perception Technology (RIPT)
		Nonstop service upgrade
		AP-based STA access control
		SSID-based STA access control
	STA Management	AP-based load balancing
		AP traffic-based load balancing
		5G priority access
		RSSI threshold
	STA RSSI Threshold	0 to 100
VVLAN	STA Idle Timeout	60 to 86,400 seconds
	STA Average Data Rate Threshold	8 to 819,200 with the accuracy of 8Kbps
	Adjusting Transmit Power of Beacon	Support
	and Probe Response	
	Offline Syslog	Support
		Setting country codes
		Manually setting transmit power
		Automatically setting transmit power
	RF Management	Automatically setting working channel
		Automatically adjusting transmission rate
		Support blackhole compensation
		Support RF interference detection and avoidance
		Web authentication
		802.1x authentication
	IPv4 Security	
		SMS authentication
		QR code authentication
	IPv6 Security	802 1x authentication
	802.11 Security and Encryption	Multiple SSIDs
		SSID hiding
		802.11i-compliant PSK authentication
		WPA and WPA2
Security		WEP (WEP/WEP128)
		WAPI
		ТКІР
		CCMP
		Protection against ARP spoofing
	SMP	Support
	CPP	Support
	NFPP	Support
	WIDS	Support
Internet Protocols	IPv4 Protocol	Ping, Traceroute
		DHCP Server
		DHCP Client

Model	Model RG-WS6008			
		DHCP Relay		
		DHCP Snooping		
		DNS Client		
		NTP		
	IPv4 Protocol	Telnet		
		TFTP Server		
		FTP Server		
		DNSv6 Client		
		DHCPv6 Relay		
		DHCPv6 Server		
		TFTPv6 Client		
		FTPv6 Server		
Internet	IPv6 Protocol	FTPv6 Client		
Protocois		IPv6 CAPWAP		
		ICMPv6		
		IPv6 Ping		
		IPv6 Traceroute		
		Manual tunnel, automatic tunnel		
	IBv/4 Pouting	Static routing OSPE		
	IPv4 Routing Table Canacity	static routing, USFF		
	IPv4 Static Routing Table Capacity			
	IPv6 Routing	Static routing		
	IPv6 Routing Table Capacity	1K		
	IPv6 Static Routing Table Capacity	1K		
		SNMP v1/v2c/v3		
	Network Management	RMON		
		Remote probe		
		Web management (Smart-web)		
		RG-SNC management		
Management	Network Management Platform	Heat Map diagram		
		RILL management		
	User Access Management	Login via console port		
		Login via Telnet		
		Login via SSH		
		Upload to FTP		
Dimensions (W × D × H) (mm)		440 × 200 × 43.6		
Rack Height		1RU		
Weight		2kg		
Installation Mode		19-inch rack		
Power Supply		100VAC to 240VAC, 50Hz to 60Hz		
Switching Power Supply		Fixed power supply		

Model	RG-WS6008
Power Consumption	<40W
Temperature	Operating Temperature: 0°C to 45°C
	Storage Temperature: -40°C to 70°C
I I. una india .	Operating Humidity: 5% to 95%RH (non-condensing)
Humidity	Storage Humidity: 5% to 95%RH (non-condensing)
Operating Altitude	0-3000m

ORDERING INFORMATION

Model	Description
RG-WS6008	Next-Gen Wireless Controller, 6 1000BASE-T ports, 2 1000BASE-T/1000BASE-X combo ports, 32 APs License by default, maximum 200 APs License, or maximum 400 APs License for Wall AP
License	
LIC-WS-32	WS Series Wireless Controllers upgrade license for 32 APs or 64 Wall APs
LIC-WS-128	WS Series Wireless Controllers upgrade license for 128 APs or 256 Wall APs

DISTRIBUTED BY

