

## Physical Specifications

Dimensions  (W × D × H)
Weight
Installation
Anti-theft Lock

## Radio Specifications

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Radio

Operating Band

Max Throughput

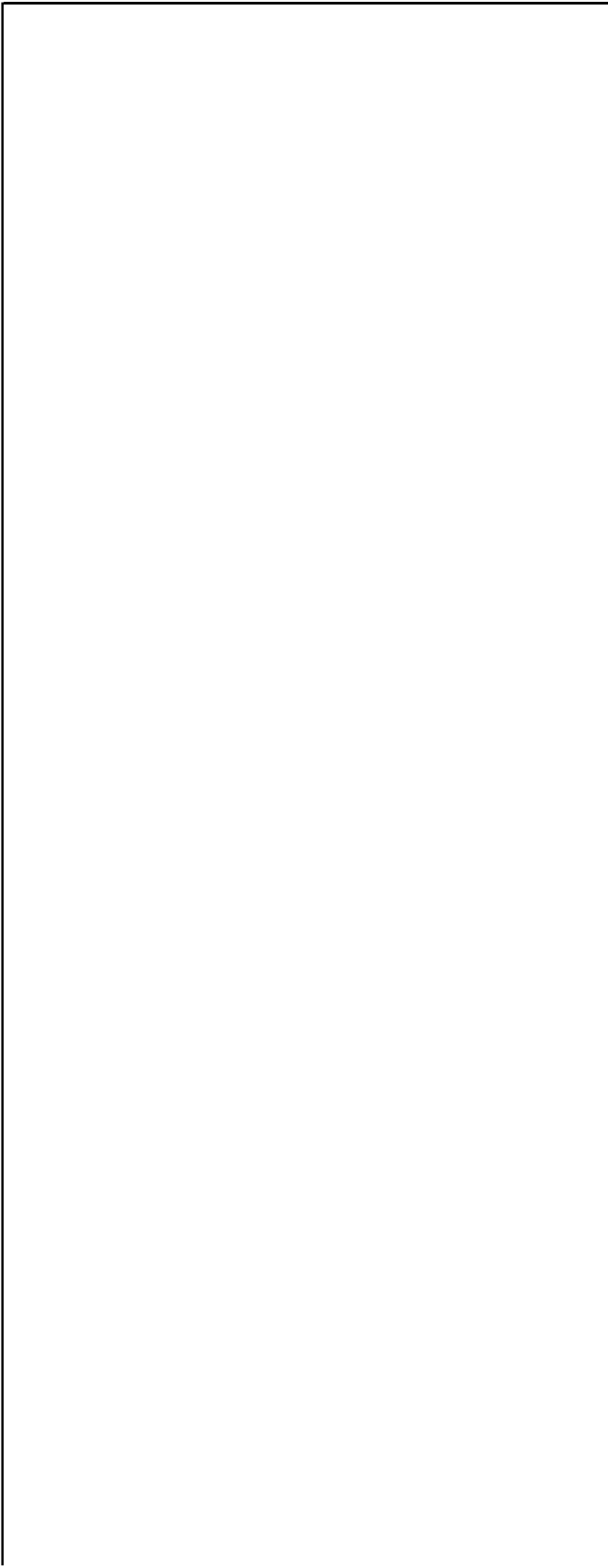
Antenna Type

Antenna Gain

Transmit Power

Adjustable Power

Modulation



Receiver Sensitivity

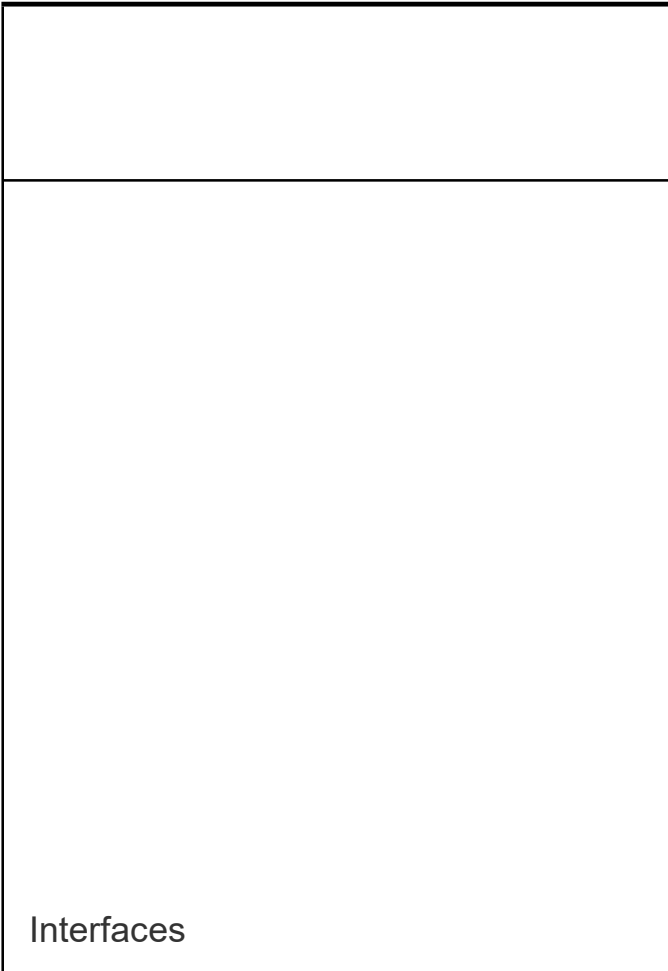


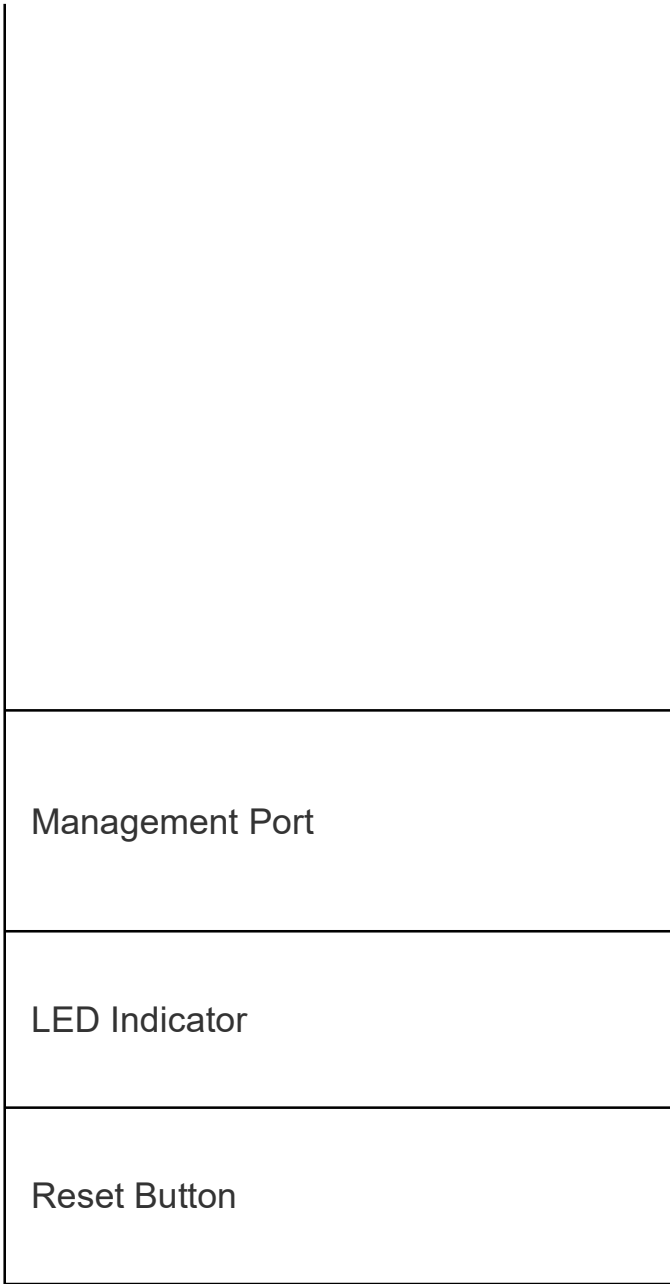
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## Interfaces





**Power**



Power Supply

Power Consumption

**Environment**

Temperature

Temperature

Humidity

IP Rating

Safety Standard

EMC Standard

**Software Specifications**


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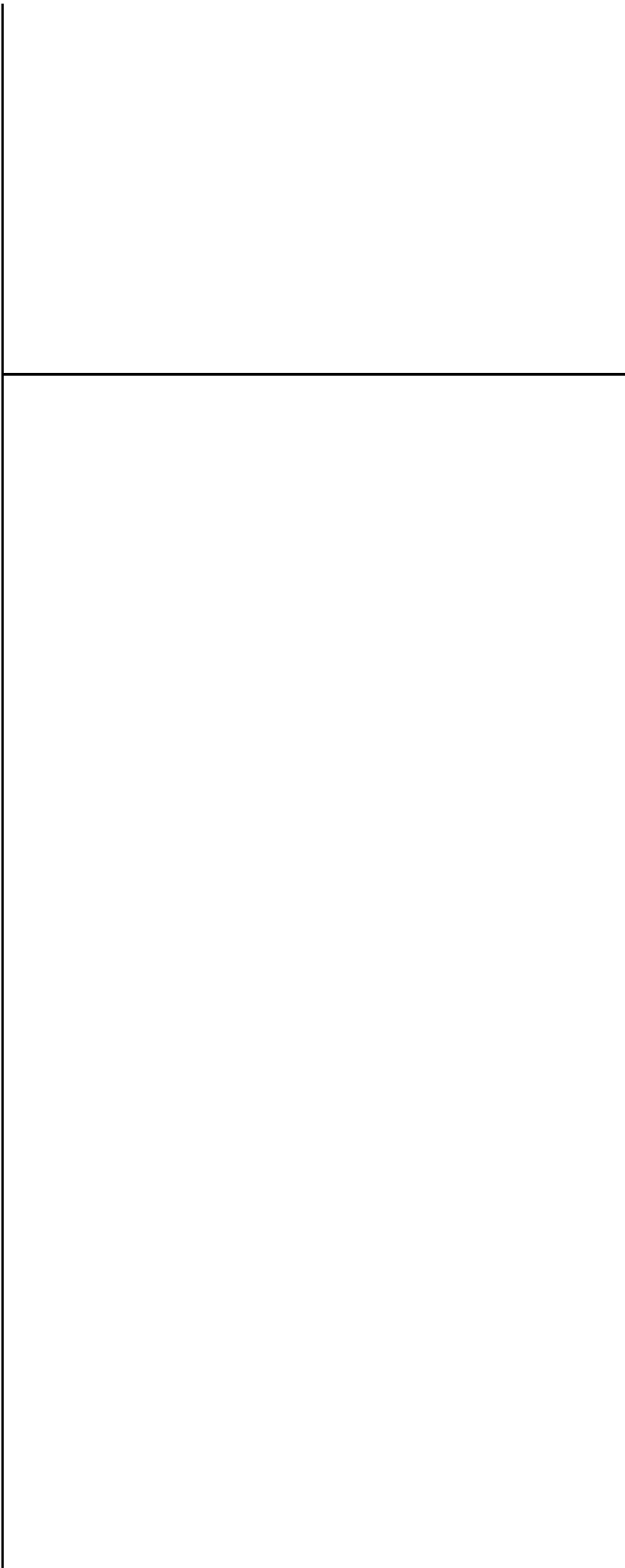
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WLAN

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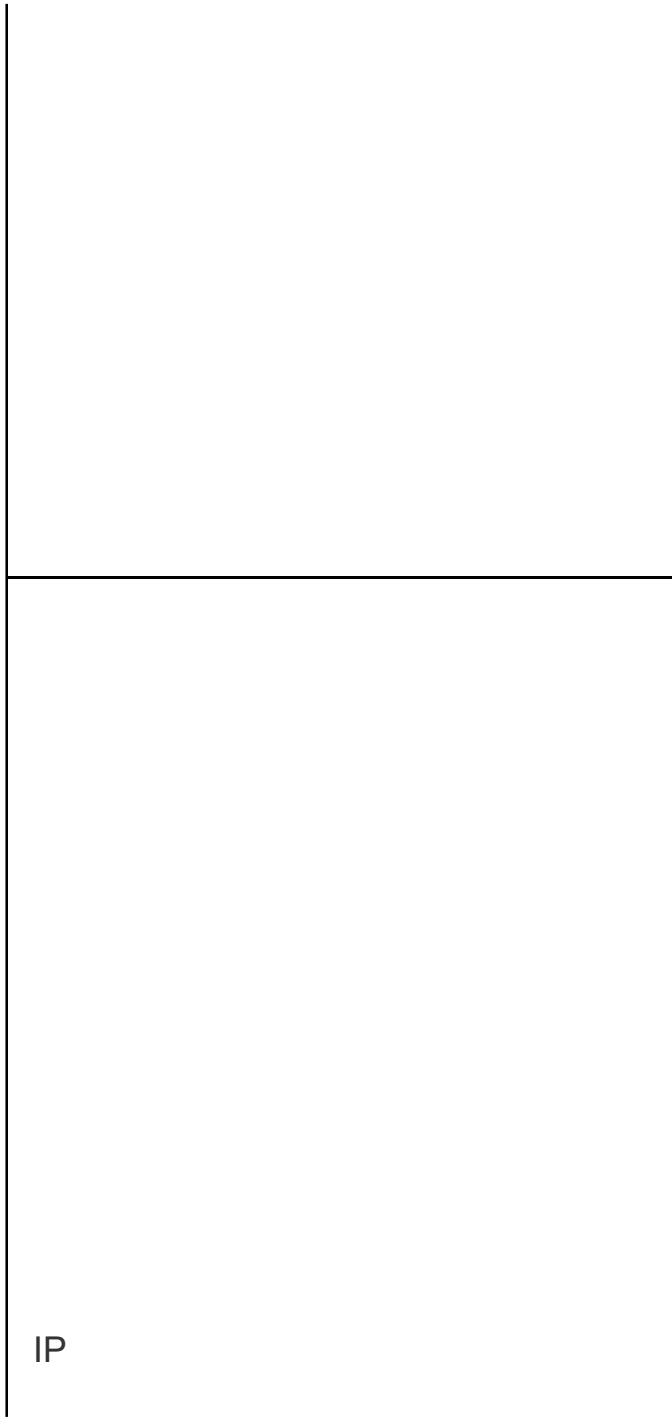
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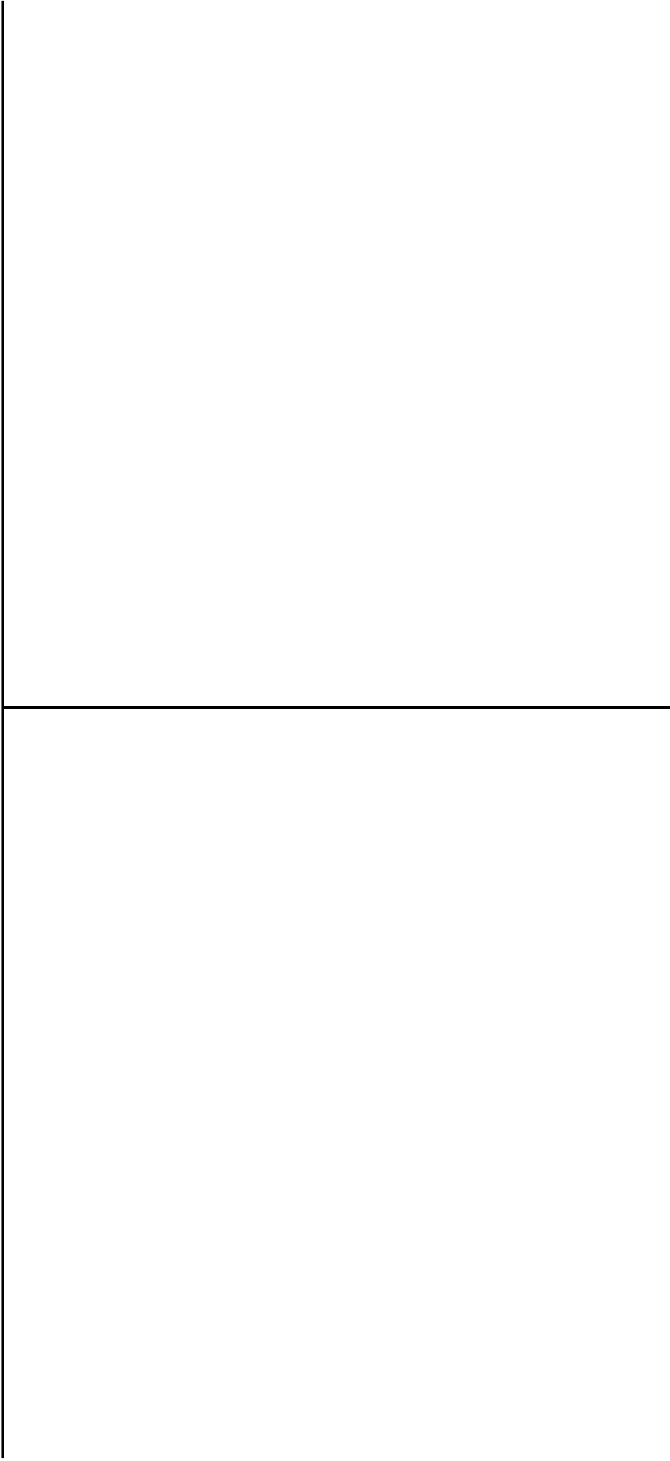
Security

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IP

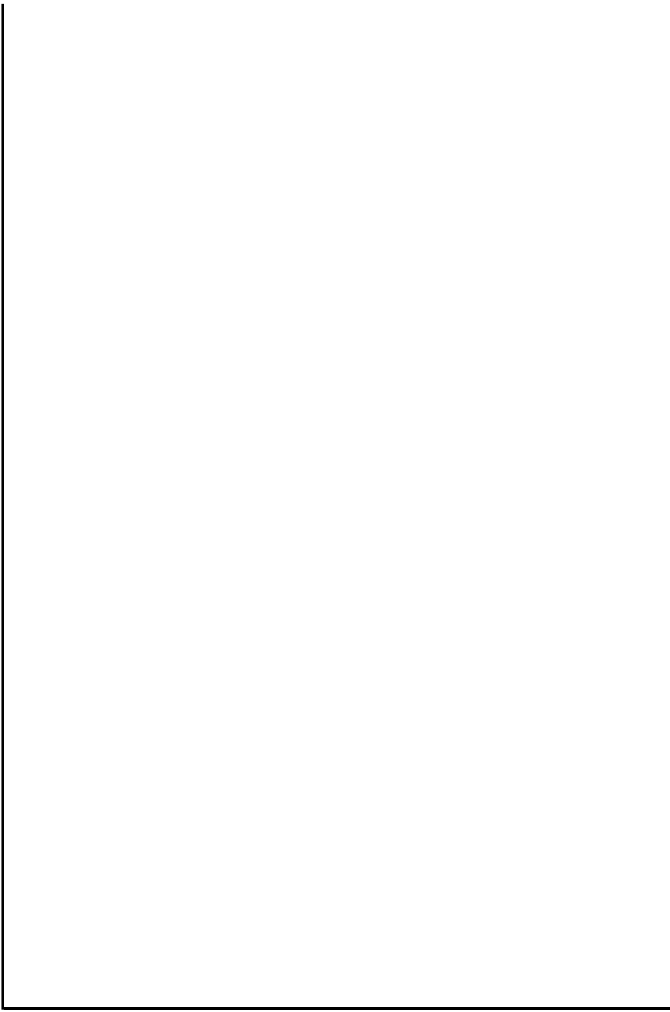


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Operation & Management



**RG-AP820-L(V3)**

220mm×220mm×49mm

Device : 0.6kg

Mounting Kit : 0.2kg

Ceiling / Wall

Support

**RG-AP820-L(V3)**

Dual-radio dual-band:

Radio1 : 2.4GHz 11ax, 2×2 MIMO

Radio2 : 5GHz 11ax, 2×2 MIMO

Radio1:

802.11b/g/n/ax, 2.4GHz~2.483GHz, HE40

Radio2 :

802.11a/n/ac/ax, 5.150GHz~5.350GHz, HE80/HE160

802.11a/n/ac, 5.470GHz~5.725GHz, 5.725GHz~5.850GHz, HE80

Note: vary depending on different countries

Radio1 : 2.4GHz, 0.574Gbps

Radio2 : 5GHz, 2.402Gbps

Maximum throughput per AP:

2.4GHz+5GHz, 2.976Gbps

Integrated Omnidirectional

2.4GHz : 3dBi

5GHz : 3dBi

20dBm

Note: vary depending on different countries

1dBm

OFDM : BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps

DSSS : DBPSK@1Mbps, DQPSK@2Mbps, and CCK@5.5/11Mbps

MIMO-OFDM : BPSK, QPSK, 16QAM , 64QAM , 256QAM and 1024QAM

OFDMA



11b : -96dBm (1Mbps) , -93dBm (5Mbps) , -89dBm (11Mbps)

11a/g : -91dBm (6Mbps) , -85dBm (24Mbps) , -80dBm (36Mbps) , -74dBm (54Mbps)

11n : -90dBm@MCS0, -70dBm@MCS7, -89dBm@MCS8, -68dBm@MCS15

11ac : HT20 : -88dBm (MCS0) , -63dBm (MCS9)

11ac : HT40 : -85dBm (MCS0) , -60dBm (MCS9)

11ac : HT80 : -82dBm (MCS0) , -57dBm (MCS9)

11ax : HE80 : -82dBm (MCS0) , -57dBm (MCS9) , -52dBm (MCS11)

11ax : 160MHz : -77dBm (MCS0) ,-50dBm (MCS11)

### **RG-AP820-L(V3)**

1 10/100/1000M BASE-T Ethernet Port, PoE In (Support IEEE 802.3af/at)

Full Spectrum Operation in IEEE 802.3af Mode

1 1G/2.5G SFP Port

1 RJ45 Console Port

1 LED Indicator

Support

**RG-AP820-L(V3)**

Local Power Supply (DC 48V/0.6A)

Note: DC power adapters should be purchased separately from third-party vendors if needed.

PoE (IEEE 802.3af Standard) - Full Spectrum Operation

12.95W

**RG-AP820-L(V3)**

Operating Temperature: -10°C~50°C

Storage Temperature: -40°C~70°C

Operating Humidity: 5%~95% (non-condensing)

Storage Humidity: 5%~95% (non-condensing)

IP41



GB 4943.1-2011, IEC 62368-1

EN 300386, GB 19286-2003, GB 17618-1998

**RG-AP820-L(V3)**

Maximum Clients : 512

Recommended Client: 120

SSID Hiding: Support

5G Priority (Band Steering): Support

Configuring the authentication mode, encryption mechanism and VLAN attributes for each SSID: Support

Remote Intelligent Perception Technology (RIPT): Support

Intelligent Device Recognition Technology: Support

Intelligent Load Balancing Based on the Number of Users or Traffic: Support

STA Limit Control: SSID/Radio based

Bandwidth Control: STA/SSID/AP-based

Support PSK and Web authentication

Data Encryption: WPA (TKIP) 、 WPA-PSK、 WPA2 (AES) 、 WPA3、 WEP (64/128bits)

PPSK authentication: Support

802.1X authentication: Support

PEAP authentication: Support

Data Frame Filtering: Allowlist, Static/Dynamic Blocklist

User Isolation: Support

Rogue AP Detection and Countermeasure: Support

Dynamic ACL Assignment: Support

RADIUS: Support

CPU Protection Policy (CPP) Support

Network Foundation Protection Policy (NFPP): Support

IPv4: Support Static and DHCP IP Address

Support Multicast to Unicast Conversion



DHCP Service: Support DHCP Snooping, Option 82, Server, Client

Support Wireless LAN Controllers:

Ruijie RG-WS Series Wireless Controller

Ruijie Cloud (Public Cloud)

Ruijie Private Cloud

Management Protocol: Telnet, SSH, TFTP, FTP, Web

Wireless Intelligent AI Optimization Service (WIS): Support

SNMP: Support V1, V2c, V3

Syslog / Debug: Support

FAT/FIT/Cloud Managed Mode Firmware: Support FAT (Standalone) or FIT (WS Controller) or Cloud Managed (Ruijie Public/Private Cloud) Management