

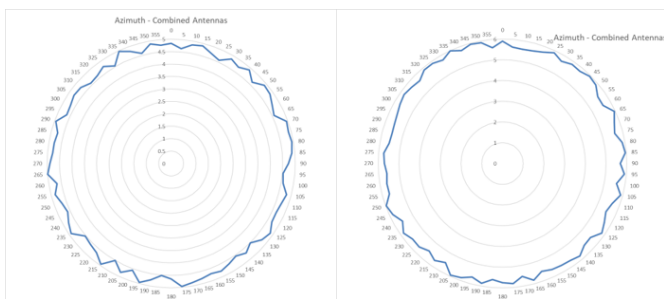
Warranty Information

The Ruijie RG-AP840-I Access Point come with 3 year warranty or extended as Limited Lifetime Warranty² (LLW). For more details, please visit <https://www.ruijienetworks.com/support/servicepolicy>.

Antenna Patterns

Horizontal planes (top view)

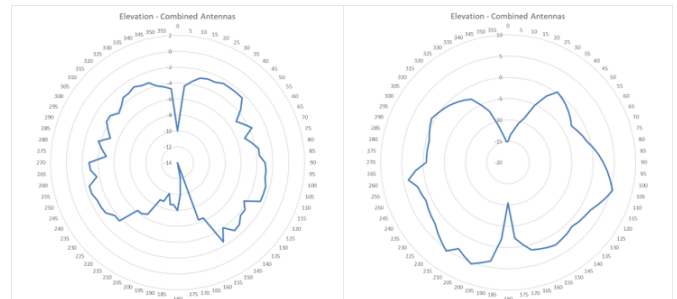
Below are the RG-AP840-I 2.4GHz and 5GHz azimuth antenna patterns:



RG-AP840-I 2.4GHz (Left) and 5GHz (Right) Azimuth Antenna Patterns

Vertical (elevation) planes (side view, AP facing down)

Below are the RG-AP840-I 2.4GHz and 5GHz elevation antenna patterns:



RG-AP840-I 2.4GHz (Left) and 5GHz (Right) Elevation Antenna Patterns

Technical Specifications

Model	RG-AP840-I
Hardware specifications	
Radio	Dual-radio dual-band: Radio 1: 2.4G 11n: 2x2 MIMO Radio 2: 5G 11ax: 4x4 MIMO
Protocol	Supports standard 802.11ax, dual-radio dual-band, concurrent 802.11ax and 802.11a/b/g/n/ac
Operating Bands	802.11b/g/n: 2.4G ~ 2.483GHz 802.11a/n/ac/ax: 5.150~5.350GHz, 5.47~5.725GHz, 5.725~5.850GHz (vary depending on different countries)
Spatial Streams	Up to 6: 2x2:2 in 2.4GHz , 4x4:4 in 5GHz
Max Throughput	Maximum throughput of 2.4G: 400Mbps Maximum throughput of 5G: 4.8Gbps Maximum throughput per AP: 5.2Gbps
Modulation	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 (up to 1024-QAM)

Note:

² For country availability, please visit official website for details

Model	RG-AP840-I
Receiver Sensitivity	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 HT80: -82dBm (MCS0), -57dBm (MCS9), -52dBm (MCS11) 11ax HT160: -80dBm (MCS0), -49dBm (MCS11)
Antenna	Integrated antenna design
Antenna Gain	2.4G: 3dBi 5G: 3dBi
Service Ports	3 10/100/1000M Ethernet ports (The LAN1 Port supports PoE in, LAN3 Port supports LAN & IoT module expansion with PoE out)
Management Port	1 console port
USB	1 USB 2.0 port
IoT Capability	BLE
Reset Button	Support
Anti-theft Lock	Support
LED Indicator	1 LED indicator (Supports red, green, blue, orange and flashing mode, which indicates device access. The indicator can be switched off to silent mode.)
Transmit Power	≤100mw (20dBm) (vary depending on different countries)
Adjustable Power	1dBm
Power Supply	Local power supply (DC 48V/1A) (Power adapters are sold separately) PoE+ (802.3at) PoE (802.3af) – Not recommended: 5G radio is degraded to 2x2 MIMO, and the PoE out of the LAN3/ IoT port is disabled
Power Consumption	<25.4W
Physical Specifications	
Temperature	Operating Temperature: -10°C to 50°C
	Storage Temperature: -40°C to 70°C
Humidity	Operating Humidity: 5% to 95% (non-condensing)
	Storage Humidity: 5% to 95% (non-condensing)
Installation Mode	Ceiling/wall-mountable
Dimensions (W x D x H)	220mm ×220mm x48.85mm (Height of the AP only, excluding the mount kit)
Weight	1.30kg
IP Rating	IP41
MTBF	250,000 hours
Certifications and Compliance	
Safety Standard	GB4943, EN/IEC 60950-1
EMC Standard	GB9254, EN301 489 EN 55032, EN 61000, EN 55035
Health Standard	EN 62311
Radio Standard	SRRC, EN300 328, EN301 893

Model		RG-AP840-I
Software Specifications		
WLAN	Maximum clients per AP	1024 (Recommended Clients: 64)
	BSSID capacity	Up to 32
	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 control	SSID/radio-based
	Bandwidth control	STA/SSID/AP-based bandwidth control
	Data encryption	WPA (TKIP), WPA-PSK, WPA2 (AES), WPA3, WEP (64/128 bits)
	PSK and web authentication	Support
	PPSK authentication (For Employee)	Support (require wireless controller)
	802.1x authentication	Support
	PEAP authentication	Support
	Data frame filtering	Whitelist, static/dynamic blacklist
	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	
IP	IPv4 and IPv6 address	Support
	Multicast routing	Multicast to unicast conversion
	DHCP service	DHCP Snooping, Option 82, Server, Client

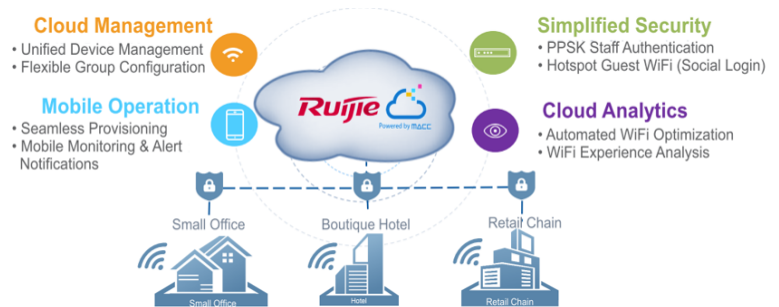
Model		RG-AP840-I
Management and Maintenance	Supported wireless LAN controllers	Ruijie WS Series Wireless Controller Ruijie MACC-Base Software Controller Ruijie Cloud (Public Cloud)
	Management protocol	Telnet, SSH, TFTP, Web
	Wireless Intelligent AI Optimization Service (WIS)	Support
	SNMP	SNMPV1,V2c,V3
	Syslog / Debug	Support
	FAT/FIT/MACC mode switching	Factory default firmware supports FAT (standalone) or FIT mode (WS controller) or MACC mode (Ruijie MACC-Base or Ruijie Cloud) management

Application Scenarios

Public Cloud for SMEs

With Ruijie Public Cloud Service adoption, the Ruijie AP800 Wi-Fi 6 series access point is perfect for various SME scenarios including small offices, boutique hotel, retail store and etc. Ruijie Cloud is the only vendor offering Enterprise Cloud at Lifetime FREE, which significantly streamline the IT operational efficiency, as well as reducing the Wi-Fi deployment complexity with cost effective approach for SMEs.

The Ruijie Cloud service provide equipment deployment, monitoring, network optimization and operational lifecycle management; enabling customers with simple plug and play deployment and operation and maintenance. Meeting the needs for automatic cloud RF planning and user experience monitoring, it also supports mobile monitoring and alert, and fast provisioning by QR-Code scanning. At the same time, it provides flexible wireless user access control features, including high security “One person, one machine and one password” PPSK, built-in cloud Portal and Facebook social login.



Ruijie Cloud Solution Highlights

Key Features:

- Unified Device Management
- Fast Provisioning by Mobile APP
- Secure PPSK Authentication for Staff
- Captive Portal & Social Authentication for Guest
- Mobile APP Monitoring & Alert