

RG-RAP1200(P) DUAL-BAND GIGABIT WALL PLATE ACCESS POINT



Ruijie Networks

Product Overview

Ruijie Reyee Series RG-RAP1200(P) dual-band gigabit wall plate AP is a high-performance wall plate AP for small and medium-sized indoor Wi-Fi scenarios. With 802.3af/at PoE support, the AP provides 4 LAN ports at the front, including 1 passthrough port, to facilitate the connection of IPTV, IP phone, etc. The AP also provides 1 gigabit uplink port and 1 passthrough port on the rear panel. Compliant with 802.11a/b/g/n/ac Wave1/Wave2 Wi-Fi protocol, the AP supports MU-MIMO dual-stream technology and offers built-in omnidirectional antennas. It can operate concurrently at 2.4GHz and 5GHz, providing high-speed wireless access of 400Mbps at 2.4GHz, 867Mbps at 5GHz and up to 1267Mbps per AP. Its 86mm wall plate installation design is an ideal choice for deployment in small-scale Internet access scenarios such as offices, commercial industry, hotels, service scenarios, etc.

The AP supports Ruijie's self-organizing network feature, which realizes auto-discovery, auto-networking and auto-configuration between gateways, switches, and wireless APs without the need for controllers or Internet access. With the Ruijie Cloud app, users can quickly complete the device deployment and configuration, remote management, operation and maintenance of the entire network, which greatly reduces the investment of equipment cost, labor cost and time cost in the process of wireless network construction.

Users can perform comprehensive local management or remote management of the equipment in the entire network via Ruijie Cloud app, equipment EWEB management, Ruijie Cloud platform, etc. Users can also share the network to third party for network hosting and collaborative management, thereby achieving simpler, easier to use, more secure and convenient enterprise network operation and maintenance.

Product Features

High-speed dual-band Wi-Fi

The device supports 2.4GHz and 5GHz dual-band communication, providing access rate of 400Mbps at 2.4GHz, 867Mbps at 5GHz and up to 1267Mbps per AP. It can provide 5GHz frequency band with less interference, wider channel, and faster speed for the terminals, allowing the users to enjoy excellent wireless experience.

Support routing and AP mode

The device supports both AP and routing mode. A wireless network can be formed with multiple APs, or it can be used as a wireless router when deployed independently. The device offers more flexible configurations, more abundant application features, and more extensive applicable scenarios.



Support Layer 3 networking

The device supports Layer 3 roaming for the Layer 3 network. When users move across the Layer 3 networks, seamless roaming can be achieved without service interruption.

Support PoE output

The AP offers 1 PoE output port. When the AP is powered by 802.3at, this port can supply power to devices below 4W (such as IP phones), expanding more service scenarios.

Stronger and more stable signals

The device uses FBAR to filter out all kinds of interferences caused by the operator's base stations, microwave ovens, Bluetooth devices, etc., so as to provide cleaner wireless signals, higher transmission rate and more stable transmission quality.

Robust casing

With the robust and flame-retardant material of the AP casing, the impact resistance is 5 times higher than that of common ABS plastic materials. The tensile and flexural strengths are increased by 30%, which is not easy to damage. Users can rest assured during usage and maintenance.

Management Features

Multiple management methods

The AP supports management via Ruijie Cloud app, Ruijie Cloud platform and equipment EWEB management to achieve local and remote management on PC and Ruijie Cloud app.

Fast and smart configuration

In large-scale complex networks, the configuration of the entire network can be completed by connecting to a single gateway device. There is no need to configure the devices separately, which can greatly reduce the device configuration time.

Scenario-based configuration

Scenario-based configurations can be performed via the web and Ruijie Cloud app, which can greatly reduce the configuration threshold of complex functions, such as visitor isolation solution, flow control solution, etc. Even novices can easily fulfill the diverse and complex requirements of the customers.

Visualized operation and maintenance

The cloud computing network topology can comprehensively present the equipment operating status of the entire network. Through the rich information in the topology, you can quickly get the full picture of the network (network egress status, link status, device status), and quantify the user experience and network quality, so that users can master the information of the entire network.

Remote collaborative management

Users can perform comprehensive remote operation, management, and maintenance of the equipment in the entire network via the Ruijie Cloud app, Ruijie Cloud platform, etc. They can also share the network to third party for network hosting and collaborative management to operate and maintain the enterprise network more efficiently.

AI & big data network optimization

Through artificial intelligence and cloud big data, the AP can perform comprehensive smart network operation, maintenance and optimization, including but not limited to:

1. Automatic identification of new equipment and adding it into the network, automatic system repair such as avoiding conflict of the WAN IP addresses

2. Smart system optimization such as service-based network policy configuration, RF channel and roaming adjustment

3. Diagnosis and repair suggestions for more than 30 common network anomalies including DHCP conflicts, abnormal negotiation rates, excessive traffic, AP disconnection and device interference.

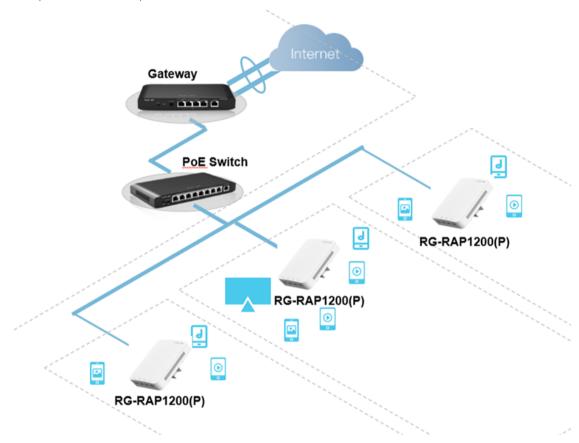
Technical Specifications

Model	RG-RAP1200(P)
Hardware specifications	
Radio	Dual-stream dual-band
Protocol	Concurrent 802.11ac wave2, wave1, 802.11a/b/g/n
Operating Bands	802.11b/g/n: 2.4G ~ 2.4835GHz 802.11a/n/ac: 5G: 5.150~5.350GHz, 5.725~5.850GHz
Antenna	PF antenna (2.4G: 2dBi, 5G: 2dBi)
Spatial Streams	2.4G 2x2MIMO 5G 2x2MIMO
Max Throughput	2.4G: up to 400Mbps 5G: up to 867Mbps Access rate per AP: 1.267Gbps
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 and 256QAM
Receiver Sensitivity	11b: -91dBm(1Mbps), -88dBm(5Mbps), -85dBm(11Mbps) 11a/g: -89dBm(6Mbps), -80dBm(24Mbps), -76dBm(36Mbps), -71dBm(54Mbps) 11n: -83dBm@MCS0, -65dBm@MCS7, -83dBm@MCS8, -65dBm@ MCS15 11ac HT20: -83dBm(MCS0), -57dBm(MCS9) 11ac HT40: -79dBm(MCS0), -57dBm(MCS9) 11ac HT80: -76dBm(MCS0), -51dBm(MCS9)
Maximum Transmit Power	5.725~5.850GHz: ≤18dBm (EIRP) 5.150~5.350GHz: ≤18dBm (EIRP) 2.4~2.4835GHz: ≤18dBm (EIRP)
Adjustable Power	1dBm
Dimensions	126mm×86mm×50mm
Weight Service Ports	0.24kg Front: 4 10/100/1000Base-T Ethernet ports LAN1 port supports IEEE.802.3af PoE OUT Rear: 1 10/100/1000Base-T Ethernet port
Management Port	N/A
LED Indicator	1 LED indicator
Power Supply	Support PoE (802.3af/at)
Power Consumption	≤8W

Model	RG-RAP1200(P)
Environment	Operating temperature: -30°C~65°C
	Storage temperature: -40°C~85°C
	Operating humidity: 0%~100% (non-condensing)
	Storage humidity: 0%~100% (non-condensing)
Installation	Wall plate installation
Safety Standard	GB4943, IEC 62368-1
EMC Standard	GB9254, EN301 489, EN50155, EN50121, EN55032, EN61000, EN55035
Vibration Standard	IEC61373
Radio Standard	SRRC certification, EN300 328, EN301 893
MTBF	>250000H
Software Features	
Operating Mode	AP mode and routing mode
WLAN	Maximum number of clients: 110
	Recommended number of clients: 80
	Up to 8 SSIDs
	Support SSID hiding
	Configuring the authentication mode, encryption mechanism, and VLAN attributes for each SSID
	SSID-based and radio-based STA limit
	Support Layer 2 user isolation
Roaming	Support Layer 2 and Layer 3 roaming
Security	Support PSK authentication
	Support static blacklist and whitelist
	Support WPA (TKIP), WPA2 (AES), and WPA-PSK data encryption
Routing	Support static IP address, DHCP, PPPoE Dial Up
	Support unified networking of all network equipment
Management and	Support local or remote management with Ruijie Cloud app
maintenance	Support local management with web
	Support remote management with Ruijie Cloud platform

Typical Applications

RG-RAP1200(P) is an ideal choice for scenarios with simple building structure, no special obstructions, and relatively concentrated users, such as conference rooms, libraries, classrooms, bars, leisure centers, etc. The AP can be flexibly implemented according to different environments, and provides user access for up to 110 terminals per AP.



Ordering Information

Model	Description
RG-RAP1200(P)	1300M dual-band gigabit wall plate AP, 4 front LAN ports, including 1 passthrough port, built-in antennas, 1 gigabit uplink port and 1 passthrough port on the rear panel, dual-band 2.4GHz/5GHz, 802.11a/b/g/n/ac Wave1/ Wave2, up to 1267Mbps access rate per AP; support AP and routing mode, Layer 3 roaming, Reyee unified networking and Ruijie Cloud app management; Support PoE (PoE power sourcing equipment is sold separately)



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