Ruijie SME Wall AP

RG-AP130(W2)V2 / RG-AP130(L) / RG-AP110-L



Ruijie Networks Co., Ltd.

For further information, please visit our website https://www.ruijienetworks.com





Product Overview

Ruijie SME Series Wall AP (inlcuded AP130(W2)V2, AP130(L) and AP110-L) are designed for wireless deployment in hotels, offices, villa and apartment buildings alike. The wall-mountable AP has design for universal socket standard with integrated multiple Ethernet LAN ports for extended connectivity for IPTV or Office Equipment application purpose. Featuring a concise design and easy deployment, the AP enables zero disruption to the interior finishes and offers the best solution for scenarios with delicate interior design.

All Ruijie SME AP can be centrally managed by Enterprise-grade Ruijie Cloud Service at Lifetime FREE, allowing fast provisioning, flexible authentication and stable wireless even at extreme environement. The RG-AP130(W2)V2 is the latest Wi-Fi5 Wave2 dualradio, dual-band wall plate AP, and provides 4 10/100/1000Mbps LAN ports. AP110(L) is entry-level wall plate AP, provides 1 10/100Mbps RJ-45 ports and 1 rear 10/100Mbps RJ-45 Uplink (PoE), delivering optimal wireless network coverage and cost protection with additional wired network interfaces.



Highlights

- Lifetime FREE Cloud Management
- Hidden Lighting Design (No Guest Interruption)
- Guarantee High Definition IPTV Application
- Screen Mirroring Control
- Universal Socket Compatible

Product Features

Enterprise Experience for SME

Lifetime Free Ruijie Cloud

A free public cloud services from Ruijie to provide a centralized device management platform for SME customer. It provides single pane of glass to deploy, manage & optimize your wired and wireless equipment without need of specialized IT staff.

Ruijie Cloud also offers an integrated mobile APP to help you deploy and monitor your network on-the-qo.



All Ruijie SME AP enjoy Lifetime FREE Enterprise Cloud Management Service



For more details, please visit Ruijie Cloud Official Website at https://www.ruijienetworks.com/products/smb/cloud-service/cloud-service/ruijie-cloud-solution.

3-Year Warranty Support

Ruijie's SME products are all bundled with an exclusive 3-year product warranty free of charge. Ruijie customers can also enjoy the complimentary professional online support which is staffed with Ruijie certified experts to respond to your problems efficiently.

High-performance 802.11ac Wave 2 Wall AP

The Ruijie RG-AP130(W2)V2 Wall AP adopts 802.11ac Wave 2 dual-radio, dual-band design and supports concurrent operation of 802.11a/n/ac and 802.11b/g/n. AP130(W2) V2 provides 4 10/100/1000Mbps RJ-45 ports and 1 1000Mbps uplink port at rear. The dual-band 2.4G and 5G coverage can achieve a concurrent coverage supporting 2 spatial streams, providing an unparalleled network experience.

Benefit of 802.11ac Wave 2? The Wave 2 technology significantly increasing multi-user throughput and essential for high-density wireless applications, by taking advantage of MU-MIMO technology which allows multiple clients processed at the same time.



802.11ac Wave 2 MU-MIMO Technology

Easy and Fast Deployment

The Ruijie SME Series Wall AP adopts a wall-mounted design with 2-step easy deployment:

Step 1: Remove the original faceplate from the wall.

Step 2: Directly install the plug-and-play Wall AP and connect with original UTP cable (PoE).

This breaks through traditional wireless network construction methods by reusing existing network cables and minimizes the impact of network construction on hotel or similar settings. As no additional cabling is required, the Wall AP delivers maximum business agility and investment protection. Ruijie also offers a wide range of optional accessories to meet your unique deployment needs.

Difficult to lay cable?



Traditional challenges on laying additional cabling for AP installation



 ${\sf RG-AP110-L} \ with \ only \ 85 mm \ Width, \ easy \ for \ installation \ between \ other \ outlet \ sockets$

Universal Compatible

The RG-AP130(W2)V2 and RG-AP110-L Wall AP provide an option of Universal Mount Kit for non-UK standard countries, such as S. Korea, Japan, Philippines. Europe, Russia, United States, etc.. (The universal mount kit sold separately for RG-AP110L)



Universal Mount Kit Installation on EU/Russia Junction Box (RG-AP130(W2)V2)



Universal Mount Kit Installation on US Junction Box (RG-AP110-L)

High Definition IPTV Application

Nowadays, IPTV service especially VoD (Video on Demand) are widely adopted by hotel chain group to deliver premium entertainment experience for their loyal guest. To guarantee for high quality IPTV service, sufficient IP bandwidth and low latency IP Network is the essential

Ruijie RG-AP130(W2)V2 is feature-customized for hotel IPTV application, upto 4 High Definition TV can be connected via the Gigabit (1000M) LAN ports, and fully support video streaming and multicast protocol such as QoS, IGMP Snooping, 802.1q, etc.

With Ruijie patent CPP (CPU Protection Policy) technology, which further protect CPUs from being abused and attacked, allowing the most stable IPTV service connectivity offering.



Screen Mirroring Control

Trend of online content streaming today, 87% of guests surveyed indicated that they would prefer the ability to cast their apps to a larger guestroom television screen.

However, the biggest challenges are lack of control measures to minimize personal smart device screen casting to other TV in another guest room or non-authorized device. And, network security breaches also increase due to same logical network segment (Layer 2) between the TV and the Guest's Smart Phone/Tablet terminal.



Mobile Casting/Mirroring Challenges Today

Ruijie introduced an Easy but Secure countermeasure on Personal Screen Casting/ Mirroring, namely Screen Mirroring Isolation². With the Ruijie Screen Mirroring Isolation, guest only limited to broadcast his/her screen on the authorized Smart TV.

As illustrated by below diagram, a QR-Code (generated by Ruijie WLAN Controller) will be displayed on the TV Screen (API integration needed with Hotel's TV Manufacturer), once the guest scan the QR-Code, the TV will be bound with the individual smart device, and the Smart TV will be available as the options for the screen casting. In the meanwhile, other TV will never be available for mirroring without QR-Code binding authorization procedure.



Screen Mirroring to TV procedures

Note

¹ Source: https://www.hotelwifi.com/wp-content/uploads/2019/02/WiFi_Whitepaper.pdf

 $^{^2}$ Ruijie WS6000 Series WLAN Controller with latest firmware required; Ruijie Cloud not support at the moment

Guarantee for Guest Comfort

Comfort is the MUST for guest relaxation. Traditional Wall AP with LED Status Indicator for engineer installation & troubleshooting use, the but light and LED status flashing will make disturbance on guest sleeping.

All Ruijie SME Wall AP designed with coverable plate, make guarantee for the guest comfortability.



Device Status Lighting is covered by plate

Full Signal Coverage

Traditional APs are installed in corridors (Ceiling) and the indoor network signals are weak or even completely degenerated after wall penetration. The Ruijie AP130 or AP110 series Wall AP, on the other hand, can be installed inside the room and hence ensures full coverage anywhere for the best user experience of voice, video or Internet browsing.

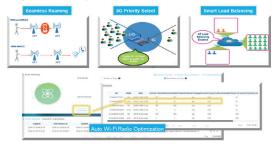


Wall AP vs Corridor AP Design

Advanced WiFi Technology Ready

With Ruijie WLAN Controller (Hardware or Cloud based) solution complement, all Ruijie SME APs can deliver Enterprise WLAN stability and performance in extreme environment, especially high-density wireless environment with heavy interference in campus, hotel, office, and shopping mall scenarios.

There are 4 essential wireless technology available, namely Seamless Roaming (L2/L3), Band Steering (5G Priority), Smart Load Balancing, and Automated Radio Resource Management (RRM or Radio Optimization).



Flexible Hybrid Management

Ruijie AP offers the flexibility for SME to choose the mode of management. There are 3 different management modes for selection. For the Ruijie Cloud option, no extra cost or firmware upgrade is required, which saves company expenses and time.



Selection between Ruijie Cloud and Hardware Controller

In some cases, a local on-premise wireless controller is required due to some business requirement. Ruijie SME AP allows the flexibility according to customer preference, the AP can be either managed by Ruijie Cloud or on-premise wireless controller.

Category	Ruijie Cloud	Hardware Controller	
Application Scenarios	SME, Retail, Boutique Hotel	Enterprise, High Density Wi-Fi	
Deployment Mode	Cloud-based (Zero Provisioning)	On-premises Hardware	
Pricing Model	FREE1	Sold Separately	
Managed Devices	Unlimited	Varies by Hardware Model	
Device Management	AP /Switches/Gateway ²	AP only	
RF Optimization	Basic	Advanced (WIS)	
Roaming	Yes	Yes	
Mobile Operation	Yes	Yes	
Captive Portal	Yes	Yes	

Ruijie Cloud and Hardware AC Comparison

User Access Control

Working with Ruijie WLAN Controller, Ruijie SME Wall AP supports a broad library of user authentication methods such as Guest Captive Portal, 802.1x, MAC address, Voucher Access Code, PPSK (for Staff) and various local authentication for customers' choice. It also supports Ruijie's end-to-end BYOD (Bring Your Own Device) Solution, complies with a standard access control system, and strictly defines access control policies in terms of user access, authorization, host compliance check, network behavior monitoring, and network threat defense. All these control measures ensure that users are authenticated before accessing a network and securely enjoy network services.

Fast Provisioning

Ruijie Cloud provides a mobile APP which allows devices onboarding and provisioning completed by just 4 simple steps. Typically, it takes less than 5 minutes from unboxing Ruijie wireless access point to Wi-Fi up and running, which significantly simplifies Wi-Fi deployment.



4-step Fast Provisioning

Mobile Operation On-The-Go

Ruijie Cloud offers an innovative breakthrough which allows device operation and management from your smartphones at your fingertips. Now you can monitor your Wi-Fi user experience, traffic and client analysis anytime and anywhere. An alarm notification will be pushed to your smartphone if there's device issue found in your network. It helps SME business to know and understand the real time situation of Wi-Fi network.



Monitoring Wi-Fi Networking on your fingertips

Technical Specifications

		RG-AP130(W2)V2	RG-AP110-L	RG-AP130-L
Target Deploymen	nts	For wireless deploy buildings	ment in hotels, office	es, residential
	Radio	Concurrent dual- radio dual-band	Single band	Concurrent dual- radio dual-band
	Protocol	802.11a/b/g/n/ac	802.11b/g/n	802.11a/b/g/n/ac
Basic Specifications	Operating Bands	2.4GHz and 5GHz	2.4GHz	2.4GHz and 5GHz
	Antenna	Built-in omnidirectional antenna (Base gain 3.5dBi) 2×2 MIMO	Built-in omnidirectional antenna 2x2	Built-in omnidirectional antenna (Base gain 3.5dBi) 2×2 MIMO
	Max Throughput	1.167Gbps	300Mbps	1.167Gbps
	Spatial Streams	2		
	IP Rating	IP41		
Ports	Service Port	Front: 4 10/100/1000M Ethernet ports Rear: 1 10/100/1000M uplink port	Front: 1 10/100M Ethernet LAN port Rear: 1 10/100M Uplink port Supports 802.3af PoE	Front: 4 10/100M Ethernet ports Rear: 1 10/100/1000M uplink port
	Power Supply	PoE (802.3af)		
Power	Power Consumption	<8W	<5W	<8W
	Maximum clients per AP	32		
	BSSID capacity	16	8	16
	SSID hiding	Support		
WLAN	Configuring the authentication mode. Encryption mechanism and VLAN attributes for each SSID	Support		
	Remote Intelligent Perception Technology (RIPT)	Support		
	Intelligent load balancing based on the number of users or traffic	Support		

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WLAN	STA control	SSID/radio-basedx		
	Bandwidth control	STA/SSID/AP-based speed control		
	Band Steering (5G Priority)	Support	N/A	Support
	Dynamic Frequency Selection (DFS)	Future release support		
	Bonjour	Support (Fit mode)		
	PSK authentication	Support		
	Web portal authentication (by Ruijie Cloud integration)	Support	Support (Ruijie EG Security Gateway Required)	Support
	802.1x authentication	Support	NA	Support
	PPSK authentication	Support (Controller required)	NA	Support (Controller required)
	Data encryption	WPA (TKIP), WPA2 (AES), WPA-PSK, and WEP (64 or 128 bits)		
	PEAP authentication	Support		
Security	Data frame filtering	Whitelist, static/dynamic blacklist		
	User isolation	Support		
	Rogue AP detection and countermeasure	Support		
	Standard & Extended IP & MAC ACL	Support		
	RADIUS	Support	NA	Support
	CPU Protection Policy (CPP)	Support	NA	Support
	Wireless Intrusion Detection System(WIDS)	Support		
	IPv4 address	Static IP address or DHCP		

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	ID 0 11	0 10	0.100	
Coourity	IPv6 address Screen Mirroring	Static IP address o	r DHCP	
Security	Isolation	Support (Fit AP)		
Multicast	IGMP Snooping	Support		
	Trunk Management (IEEE 802.1q)	Support		
	Network	SNMP v1/v2C/v3, Telnet, TFTP, FTP and Web		
Management and	management	management		
Maintenance	Fault detection and alarm	Support		
	Cloud AC management	Support		
	Statistics and logs	Support		
External	Lock	Anti-theft screws and ordinary	N/A	Anti-theft screws and ordinary
Characteristics		screws		screws
	LED Indicators	1 LED status indicator		
	Wi-Fi Alliance Certification	Support		
	Safety Standard	GB4943, EN/IEC 60950-1		
Relevant Standard	EMC Standard	GB9254, EN301 489		
	Health Standard	EN 62311		
	Radio Standard	EN300 328, EN301 893		
	Vibration Standard	IEC60068 - 2-31, ETSI EN300 019, NEBS GR-63-CORE		
Specifications	Dimensions (H x W x D) (mm)	115 × 86 × 37	86 × 85 × 34	116 × 86 × 42
	Weight	0.19kg	0.1KG	0.23kg
		Operating	Operating	Operating
	Temperature	Temperature:	Temperature:	Temperature:
		-10° C to 45° C	0° C to 40° C	-10° C to 45° C
		Storage Temperature: -40° C to 70° C		
Work Environment	Humidity	Operating	Operating	Operating
		Humidity: 5%	Humidity: 5%	Humidity: 10%
		to 95% (non-	to 95% (non-	to 95% (non-
		condensing)	condensing)	condensing
		Storage Humidity: 5% to 95% (non-condensing)		
		Standard 86- type faceplate installation	Compatible with UK/US/	0
Installation Mode		Universal Mount Kit included for US/EU Junction box	*Universal Mount Kit need to purchase separately for US/ EU junction box	Standard 86- type faceplate installation
		installation		

Typical Applications

ECO Hotel/ /Villa

Ruijie SME Wall AP series is designed for the simplicity and ease of use application in many SME scenarios especially for Economic/Budget Hotel and Villa.

Challenges:

- Unstable WiFi: Every week need to restart
- Customer loss due to BAD WiFi comment
- Budget only enough for SOHO branding

Our Solutions:









Dummy App Provisioning

one Gateway

One-stop Solution

FREE Cloud Manageme

We are helps SME to streamline the IT operational efficiency, reduce the Wi-Fi deployment complexity with cost effective approach. Ruijie Cloud Service is Ruijie's easy and efficient cloud solutions for chain stores, small and medium-sized businesses and boutique hotels. The solutions include equipment deployment, monitoring, network optimization and operational lifecycle management, enabling customers with simple plug-and-play deployment, operation and maintenance.



ECO Hotel /Villa Solution Topology

Boutique Hotel Solution

Ruijie offers the "5-Star Guest Wi-Fi Experience" solution offering for Boutique Hotel. Ruijie understand Boutique Hotel customer have limited IT and Budget support, but they like many 5-Star grade hotel, guest experience is utmost important for business survival and accredit for good scoring at online hotel booking agency.

Challenges:

- Dropping of Internet rating for bad guest Wi-Fi
- No dedicated IT team
- No money for enterprise-grade big brand

Our Solutions:









No Controller at Premises

al Acceleration Fle Technology V

ble Guest I Fi Policy

Ruijie providing a comprehensive solution offering from scenario-based wireless access points, switches, and internet gateway. Taking advantages of Ruijie Cloud management, no separate controller required on customer-premises. Every guest room is recommended for one unit of AP130(W2)V2 for best coverage, and AP730-L Tri-band Wave2 Access Point can be selected for high density wireless environment, of which one single AP730-L can support upto 768 clients. Together with Ruijie EG Security Gateway, the Boutique Hotel can enjoy stable and fast internet connectivity with flexible guest access control policy.



Boutique Hotel Solution Topology

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Ordering Information

Model	Description
RG-AP130(W2)V2	Wall-mounted 802.11ac Wave 2 (WiFi5) Access Point, dual-radio, dual-band, 4 GE LAN, 1 GE Uplink, access rate up to 1.167Gbps, 2 spatial streams, FAT/FIT mode, PoE power supply or local DC power supply; Bundled with Ruijie Cloud Service lifetime license (US/EU mount kit accessories is included) (PoE or DC power adapter sold separately)
RG-AP130(L)	Wall-mounted Wireless AP, standard size of 86-type faceplate, support concurrent 802.11a/n/ac and 802.11b/g/n, support 300Mbps@2.4GHz and 867Mbps@5GHz, FAT/FIT mode, PoE power supply (PoE adapter sold separately)
RG-AP110-L	Wall-mounted Wireless AP, sliding cover design, standard size of 86-type faceplate, support concurrent 802.11b/g/n, support 300Mbps@2.4GHz, FAT/FIT mode, PoE power supply (PoE adapter sold separately) (US/EU mount kit accessories sold separately)
Optional Accessories	
RG-AP100-MNT	Universal Mount Kit (US/EU Junction Box) for AP110-L, 10 units per set





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