RG-AP130 Series
Wall AP Datasheet

Ruijie RG-AP130 Series Wall AP is designed for wireless deployment in hotels, offices, residential buildings and settings alike. The wall-mountable AP has the same size as a standard 86-type faceplate with integrated Ethernet and voice ports. 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.

HIGHLIGHTS

- AP130(W2) IEEE 11ac Wave 2 Ready
- Fast and Easy WiFi Deployment
- Resue Existing Cabling Structure for Investment Protection
- Standard 86-type Faceplate Cover (4 Color Options)

The dual-radio, dual-band AP supports concurrent operation of 802.11a/n/ac and 802.11b/g/n. The RG-AP130 (W2) equipped with the advanted Wave 2 RF chip, supports the feature of MU-MIMO and improves the user experience for concurrent access. AP130(L) provides 4 10/100Mbps RJ-45 ports and 1 RJ-45 Voice/ PoE pass-through port (RJ-11 combo), and AP130(W2) provides 4 1000Mbps or 100Mbps RJ-45 ports and 1 RJ-45 Voice/PoE pass-through port (RJ-11 combo), delivering optimal wireless network coverage and cost protection with additional wired network interfaces and voice ports.

PRODUCT FEATURES

High-performance 802.11ac Wall AP

The Ruijie RG-AP130 Series Wall AP adopts a dual-radio, dual-band design and supports concurrent operation of 802.11a/n/ac and 802.11b/g/n. AP130(L) provides 4 10/100Mbps RJ-45 ports and 1 RJ-45 transparent Voice/PoE pass-through port (RJ-11 combo). AP130(W2) provides 4 1000Mbps or 100Mbps RJ-45 ports and 1 RJ-45 transparent Voice/PoE pass-through port (RJ-11 combo). The AP on the rear also offers 1 1000Mbps uplink port and 1 RJ-45 transparent pass-through port (RJ-11 combo). The dual-band 2.4G and 5G coverage can achieve a concurrent coverage supporting 2 spatial streams, providing an unparalleled network experience.

MU-MIMO Support

The wall-mountable RG-AP130(W2) supports the MU-MIMO feature. Most single-stream end devices only utilize half of the resources of the dual-stream RG-AP130(W2) Wall AP with the other half left unused. The wasted AP resources will stagnate the enhancement of user experience. With the MU-MIMO feature, RG-AP130 (W2) makes full use of the AP resources and is capable to serve two end devices concurrently, improving the user experience.

Easy and Fast Deployment

The RG-AP130 Series Wall AP adopts a wall-mounted design with 2-step easy deployment:

Step 1: Remove the original 86-type 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?

How to install AP in room?

Traditional challenges on laying additional cabling for AP installation

Stylish Casing in Different Colors

The RG-AP130 Series Wall AP offers a collection of colorful covers to accommodate various interior design styles. You can select the best fit from gold, white, black and silver.

Full Signal Coverage

Traditional APs are installed in corridors and the indoor network signals are weak or even completely degenerated after wall penetration. The RG-AP130 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.

Unified Management of FAT and FIT Modes

The RG-AP130 Wall AP supports both FAT and FIT AP modes, which can be flexibly selected as desired. The Wall AP allows easy upgrade of WLAN to a large-scale network, fully protecting users' investment costs. In the hotel scenario, the deployment involves a large number of guest rooms and so is the amount of APs. AP management of such a large scale is what current hospitality solutions struggle to guarantee. The RG-AP130 Wall AP offers a simple and easy solution to lessen administrator workload. Teaming up with Ruijie's Wireless Access Controllers series, the solution enables centralized AP management and fast troubleshooting. Comparing with traditional SOHO APs, the RG-AP130 Wall AP greatly facilitates O&M personnel to manage the whole wireless network.

Comprehensive Security Protection

Industry-leading Double Security Designs

The RG-AP130 Wall AP is manufactured using qualified ABS+PC materials, offering superior shock, pressure and temperature resistance for secure deployment. The specially designed screw protects the AP from malicious damage or theft. The Wall AP and color case also guard against theft with a unique security key. The administrator can manage all the APs using one security key with ease.

User Access Control

The RG-AP130 Wall AP supports a broad library of user authentication methods such as web, 802.1x, MAC address, and 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.

Full Security Protection

Teaming up with Ruijie's integrated network management system RG-SNC (Smart Network Commander) and RG-WS Wireless Access Controller Series, the Wall AP delivers outstanding security features including Wireless Intrusion Detection System (WIDS), RF interference location, rogue AP countermeasures, anti-ARP spoofing, and DHCP.

Multiple Easy-To-Use Authentication Modes

As the key components of Ruijie's intelligent cloud-based RG-MACC platform, the RG-AP130 Series offers secure and optimal network connections that are required in various scenarios. The RG-AP130 Series supports convenient and high-efficiency Protected Extensible Authentication Protocol (PEAP), web portal authentication, SMS authentication, and voucher (QR code) authentication.[1]

Voucher (QR code) authentication is another wireless security highlight, enabled by Ruijie's RG-MACC-SAM platform, which generates one-time or pay-per-use vouchers in recurring or one-time format with time-based policies, streamlining and simplifying the generation and management of QR code or voucher.
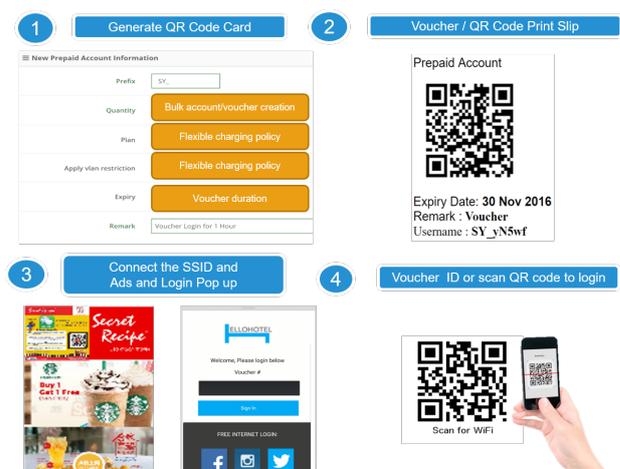
Advanced guest interfaces of the QR code authentication

Note:

[1]The authentication modes require the deployment of the RG-MACC-SAM.

TECHNICAL SPECIFICATIONS

Model			RG-AP130(L)	RG-AP130(W2)
Target Deployments			For wireless deployment in hotels, offices, residential buildings	
Basic Specifications		Radio	Concurrent dual-band dual-radio	
		Protocol	802.11a/b/g/n/ac	802.11a/b/g/n/ac, Wave 2
		Operating bands	2.4GHz and 5GHz	
		Antenna	Built-in omnidirectional antenna (Base gain 3.5dBi) 2×2 MIMO	Built-in omnidirectional antenna 2x2 MU-MIMO
		Antenna gain	3dBi	
		Max throughput	300Mbps@2.4GHz 867Mbps@5GHz 1.167Gbps per AP	
		Spatial streams	2	
		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	DSSS: CCK@5.5/11Mbps, DQPSK@2Mbps, DBPSK@1Mbps OFDM: 64QAM@48/54Mbps, 16QAM@24Mbps, QPSK@12/18Mbps, BPSK@6/9Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM
		Receiver sensitivity	11b/g: -94dBm(1Mbps), -74dBm(54Mbps) 11a: -90dBm(6Mbps), -74dBm(54Mbps) 11n HT20: -72dBm(MCS7, -68dBm)MCS15 11ac HT20: -90dBm(MCS0), -65dBm(MCS8) 11ac HT40: -85dBm(MCS0), -60dBm(MCS9) 11ac HT80: -82dBm(MCS0), -58dBm(MCS9)	
		Maximum transmit power	≤100mW (20dBm, transmit power of the RF card only)	
		IP rating	IP41	
Ports		Service port	Front: 4 10/100M Ethernet ports Side: 1 RJ-45 pass-through port (RJ-11 combo) Rear: 1 10/100/1000M uplink port 1 RJ-45 pass-through port (RJ-11 combo)	Front: 4 10/100/1000M Ethernet ports Side: 1 RJ-45 port (RJ-11 combo) Rear: 1 10/100/1000M uplink port 1 RJ-45 pass-through port (RJ-11 combo)
		Management port	1 console port (Micro USB)	
Power		Power supply	PoE (802.3af)	PoE (802.3af), local DC power supply
		Power consumption	<8W	
WLAN		Maximum clients per AP	Up to 32	
		BSSID capacity	Up to 8 per radio Up to 16 per AP	
		SSID hiding	Support	
		Configuring the authentication mode, encryption mechanism, and VLAN attributes for each SSID	Support	

Model		RG-AP130(L)	RG-AP130(W2)
WLAN	Remote Intelligent Perception Technology (RIPT)	Support	
	X-speed	Support	
	Intelligent load balancing based on the number of users or traffic	Support	
	STA control	SSID/radio-based	
	Bandwidth control	STA/SSID/AP-based speed control	
	Preference for 5 GHz (band select)	Support	
	Wireless position tracking	Support	
	Dynamic Frequency Selection (DFS)	Future release support	
Security	PSK, web, and 802.1x authentication	Support	
	Data encryption	WPA (TKIP), WPA2 (AES) , WPA-PSK, and WEP (64 or 128 bits)	
	QR code authentication	Support	
	SMS 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	
	Wireless Intrusion Detection System (WIDS)	Support	
	Wireless Intrusion Prevention System (WIPS)	Support	
Routing	IPv4 address	Static IP address or DHCP reservation	
	ICMPv6	Support	
	IPv6 transparent transmission	Support	
	Multicast	Multicast to unicast conversion	
Management and Maintenance	Network management	SNMP v1/v2C/v3, Telnet, TFTP, FTP and web management	
	Visualized wireless heat map analysis	Support (need to integrate with SNC)	
	Real-time spectrum analysis	Support (need to integrate with SNC)	
	Fault detection and alarm	Support	
	Cloud AC management	Support	
	Statistics and logs	Support	
	FAT/FIT switching	The AP working in FIT mode can switch to the FAT mode through the RG-WS wireless AC. The AP working in FAT mode can switch to the FIT mode through a local console port or Telnet.	

Model		RG-AP130(L)	RG-AP130(W2)
External Characteristics	Lock	Standard: Anti-theft screws and ordinary screws Optional: Lock and key	
	LED indicators	1 LED status indicator (hidden) (configurable to switch off)	1 LED status indicator
Relevant Standard	Wi-Fi alliance certification	Support	
	Safety standard	GB4943, EN/IEC 60950-1	
	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 (W x D x H) (mm)	116 × 86 × 42	
	Weight	0.23kg	
Work Environment	Temperature	Operating Temperature: -10°C to 45°C	
		Storage Temperature: -40°C to 70°C	
	Humidity	Operating Humidity: 10% to 95% (non-condensing)	
		Storage Humidity: 5% to 95% (non-condensing)	
Installation Mode		Standard 86-type faceplate installation	

TYPICAL APPLICATIONS

RG-MACC Cloud Deployment

RG-MACC Solution Architecture
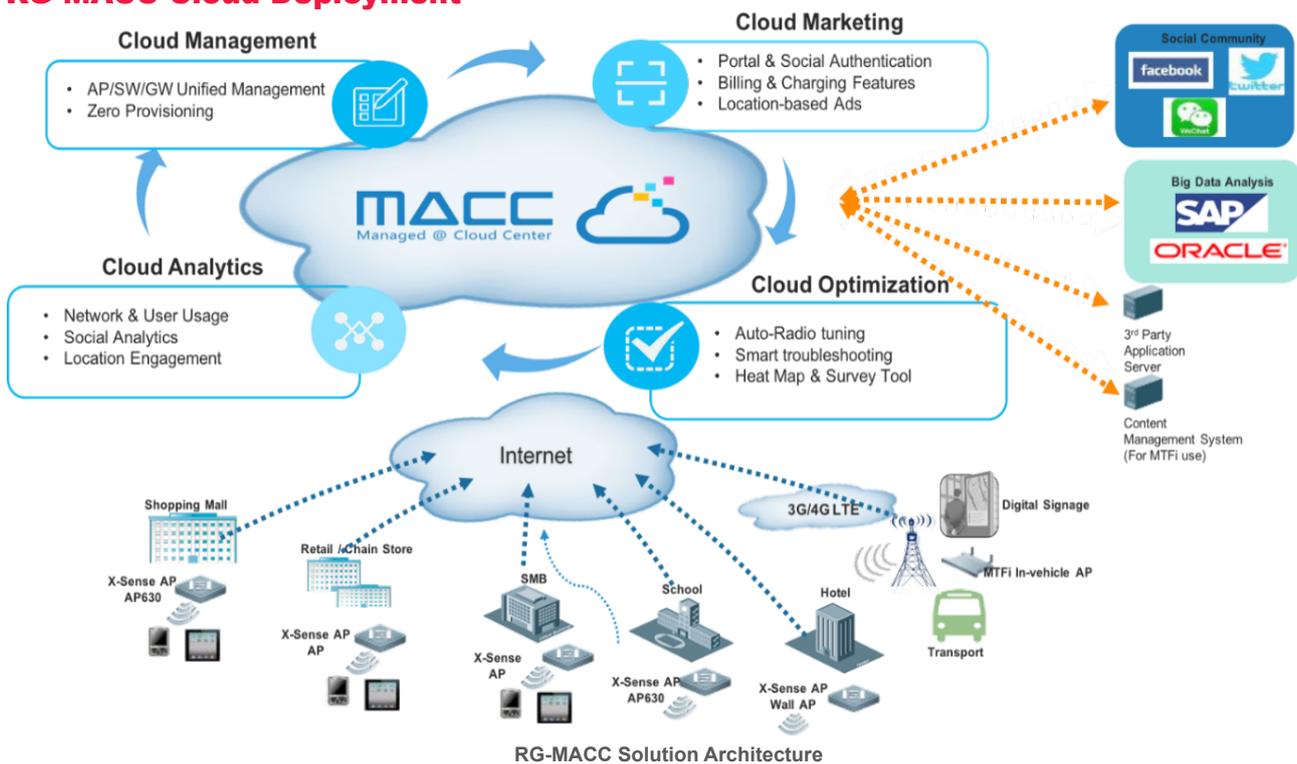
As the RG-MACC (Managed @ Cloud Center) solution component, the RG-AP130 Wall AP Series is designed for wireless deployment in hotels, offices, residential buildings and settings alike.

The Wall AP Series achieves unified management on cloud through the cloud-based wireless control software (RG-MACC). The cloud controller supports device configuration, upgrade and monitoring in groups. Working with Ruijie RG-MACC Platform, the AP Series enables advertising push to Wi-Fi users and maximizes the marketing values.

The RG-AP130 APs can integrate with Ruijie RG-MACC that streamlines user authentication and advertising push. Social community authentication via Facebook, Twitter and WeChat is supported to collect customer information for big data analysis.

Compatible with the RG-MACC platform, the RG-AP130 Wall AP Series is able to scale its deployment according to the evolving requirements of networks as shown in the above solution diagram.
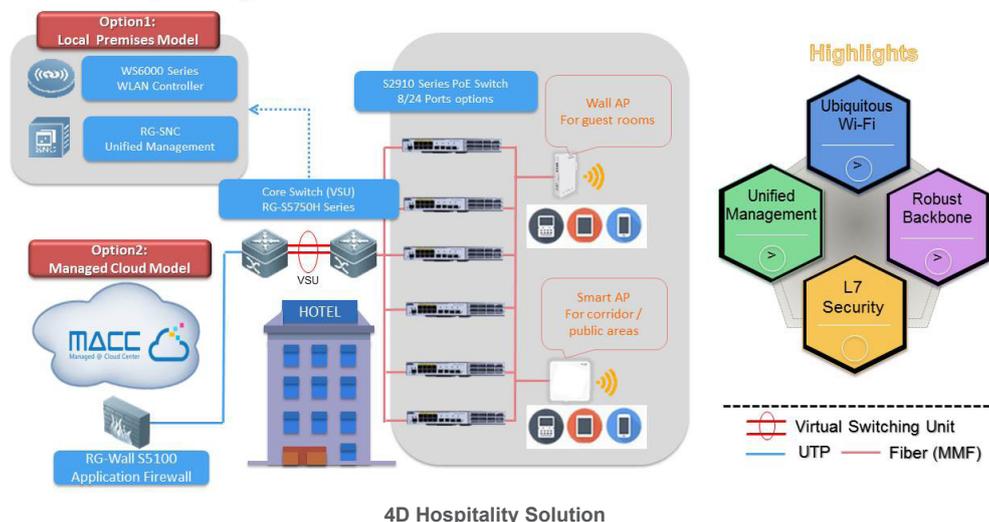
4D Hospitality Solution

Ruijie helps you to innovate your hotel with a smart network. Our 4D Hospitality Solution features ubiquitous Wi-Fi, robust backbone, Layer 7 security protection and unified management to transform your hotel network into a revenue-generating asset with a competitive edge.

The AP130 Wall AP Series can be deployed in hotel rooms. The mini-sized wall-mountable AP has the same size as a standard 86-type faceplate with integrated Ethernet and VoIP ports. Featuring a compact design and easy deployment, the AP enables zero disruption to the interior finishes and offers the best solution for scenarios with delicate interior design. This breaks through traditional wireless network construction methods by reusing existing network cables and minimizes the impact of network construction in hotels or similar settings. As no additional cabling is required, the Wall AP delivers maximum business agility and investment protection.

Smart APs can be deployed in the corridors and public areas to provide wireless access. The whole network can be centrally managed via the on-premises hardware WLAN controller and Ruijie's network management software RG-SNC or another option can be to manage the whole network using Ruijie's RG-MACC Managed Cloud Solution to unify management and configuration of APs, switches and gateway devices, reducing the total cost of investment while ensuring high usability.

4D Hospitality Solution

ORDERING INFORMATION

Model	Description
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, 4 color plate cover options (white by default, minimum order quantity for black/silver/gold: 500 units), FAT/FIT mode, PoE power supply (PoE adapter sold separately)
RG-AP130(W2)	Wall-mounted Wireless AP, standard size of 86-type faceplate, built-in antenna, support concurrent 802.11a/n/ac and 802.11b/g/n, 2 spatial streams, supports 802.11ac Wave 2, supports MU-MIMO, 4 color plate cover options (white by default), FAT/FIT mode, PoE power supply (PoE adapter sold separately) or local DC power supply, standard package
Optional Accessories	
10*RG-AP130(W) (Black Cover)	Black color plate for AP130(W2) and AP130(L) (Qty: 10) (Minimum order quantity: 50 units)
10*RG-AP130(W) (Gold Cover)	Gold color plate for AP130(W2) and AP130(L) (Qty: 10) (Minimum order quantity: 50 units)
10*RG-AP130(W) (Silver Cover)	Silver color plate for AP130(W2) and AP130(L) (Qty: 10) (Minimum order quantity: 50 units)
RG-AP130(W) (Security Key)	Security key for AP130(W2) and AP130(L)
RG-AP130(W) (Lock Bar)	Lock bar for AP130(W2) and AP130(L)

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