SME Access Point Datasheet

AP730-L, AP720-L, AP710 & AP210-L

Ruijie Networks Co., Ltd.

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

INNOVATION
Beyond Networks

Ruijie

|Product Overview

In today's SME environment landscape, there are many challenges facing by business owner to provide good performance yet highly reliable Wi-Fi network to cater the internal business requirement as well as offers guest Wi-Fi services to visitor. Few common challenges of customers:

- Insufficient budget for Wi-Fi

- Require simple Wi-Fi deployment

- Lack of IT staff to manage the Wi-Fi

- Customers complain about the Wi-Fi

Ruijie truly understands the challenges of to have best class of Wi-Fi in SME environment. With the dual-band access points of the Ruijie SME AP Series, cost effective way to increase your overall Wi-Fi network operational efficiency and enable highly secure wireless for employee and guest access.

Overview

In today's fast-changing business environment, a reliable and high-performance Wi-Fi infrastructure plays a vital role to ensure the business continuity.

Ruijie AP730-L with unique Wave 2 Tri-band deign is optimized for high density user in SME environment which catering upto 768 users without any issue.

Ruijie AP720-L (11ac Wave2) and AP710 are purpose-built indoor wireless access points designed for small and medium-sized business (SME).

| AP730-L | AP720-L & AP710 | AP210-L |

Highlights
- Maximize ROI (Lifetime Free Cloud Management & WIS Optimization Service)
- Hybrid Management (Cloud / Controller / Standalone)
- Fast Provisioning by Ruijie Cloud Mobile APP
- Automated Radio Optimization by Big Data Technology
- Stylish Design (Integrated Antenna)
- 3-Year Hardware Warranty

Enterprise Experience for SME

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-go.

Enterprise Support for SME

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.

Product Features

Perfect for High Density Wi-Fi

Ruijie AP730-L is specially designed for dense Wi-Fi usage environment like Restaurant, Hotel Reception & Conference Room, Student Lecture Hall, etc. Upto 768 clients per AP supported by AP730-L, max wireless throughput upto 2130Mbps, this is take advantage of IEEE 802.11ac Wave 2 standard (WiFi 5) and unique Tri-band radio design, with single 2.4G radio and dual 5G radio for client access at concurrent, each radio can effectively load balance the traffic without bring additional interference for the environment.
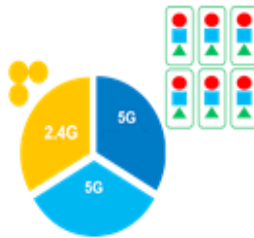
Tri-band design (AP730-L)   Max 768 Client per AP supported by AP730-L

Flexible Hybrid Management

Ruijie SME 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.

| Ruijie Cloud | Hardware Controller | Standalone |

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	FREE[1]	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

Performance Guarantee (Tolly© Certified)

Tolly Group is one of the reputable 3rd party independent performance testing organization. Over 65% of Fortune 100 Companies turn to Tolly Reports to assist in strategic technology decisions.

The Ruijie SME Wireless Access Point performance is further validated in Tolly certified report. We have outperformed other major vendor flagship wireless access point in the real-world performance rating.

High Density Users Video Streaming Results

		Video Streaming User Experience Score (1 to 10, higher is better)	Lagging Time (seconds) - Less is better	Lagging Percentage - Less is better
32 Clients	Ruijie RG-AP710	8.3	7.2	12.5%
	Ubiquiti UniFi AP-AC-LR	6.8	15.2	26.3%
100 Clients	Ruijie RG-AP730-L	9.4	2.1	3.6%
	Ubiquiti UniFi AP-AC-Pro	5.5	23.3	41.6%
	Huawei AP4051TN	9.1	3.2	5.7%

Note: Clients were 1x1:1 Android tablets. The test platform included one management server which integrated the video streaming server, and the Android app on each client. Once engineers launched the test, all clients started streaming the 2.1Mbps bitrate 720p video in the app over the AP at the same time using unicast. See Figure 10 for the test environment.
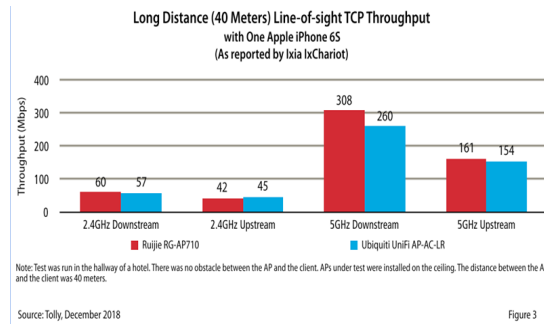
Source: Tolly, December 2018   Table 1

On 32 & 100 Client Test: Ruijie AP result upto 90% LESS video lag time (vs Ubiquiti and Huawei)
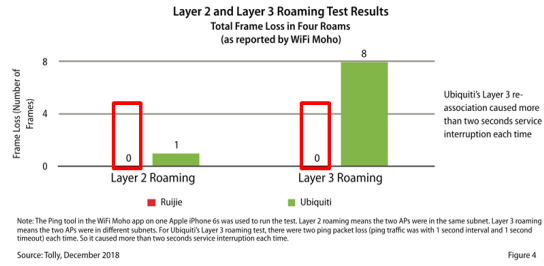
Wi-Fi Roaming Test: Ruijie AP result zero packet loss in Layer 2 & 3 Roaming (vs Ubiquiti)

Long Distance Test: Ruijie AP result 15% better performance (vs Ubiquiti)

Stylish Design

SME APs all employ a simplistic and stylish design to fit different scenarios. The APs feature an integrated antenna design and hidden LAN port along with hidden cabling to hide the messy wires, which gives a professional and simplistic deployment style that is less noticeable.
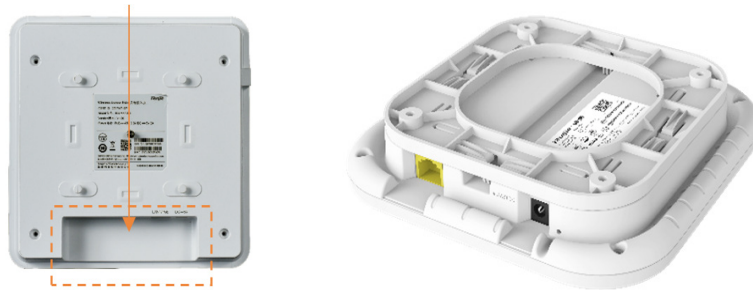

Hidden LAN Port Design for AP720-L/AP710 (left-side), AP210-L (right-side)

PPSK Enterprise Authentication[1]

For internal staff, it is hassled to maintain the pre-defined PSK and distribute among them. Especially for offboarding employee, potential Wi-Fi PSK leaked out could be harmful to your network.

With Ruijie PPSK, you now can easily provide different Wi-Fi password for each user. It tied to individual end user devices like laptop or smartphone and the same password can't be used by other. Possibility of Wi-Fi password leak out eliminated completely.

[1] Ruijie Cloud or Hardware Controller required
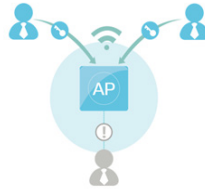
Simple and Effective Wireless Security Practice

Social Media Login[2]

Social media is huge part of our lives, it is easier to and more convenient to let your guest login to your Wi-Fi by using their social media credential. Ruijie Cloud provides an ease of use integrated Facebook for guest Wi-Fi login.

A simple captive portal with Facebook login button can be built easily by using step by step wizard. No web programming skill is required!

Simple Captive Portal with Facebook Login Button

Fast Provisioning[3]

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[4]

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.

[2] Ruijie Cloud required
[3] Ruijie Cloud required
[4] Ruijie Cloud required
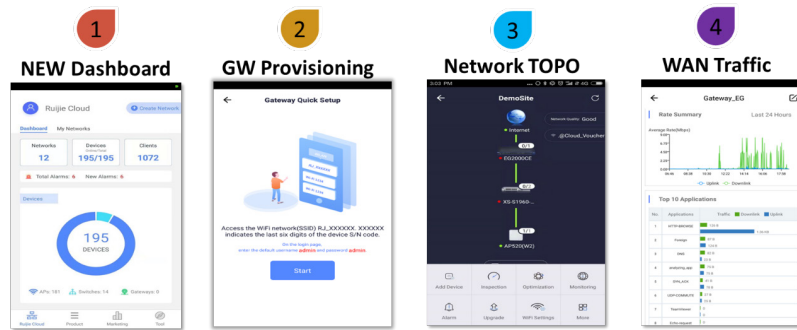
Monitoring Wi-Fi Networking Using Your Smartphone

Technical Specifications

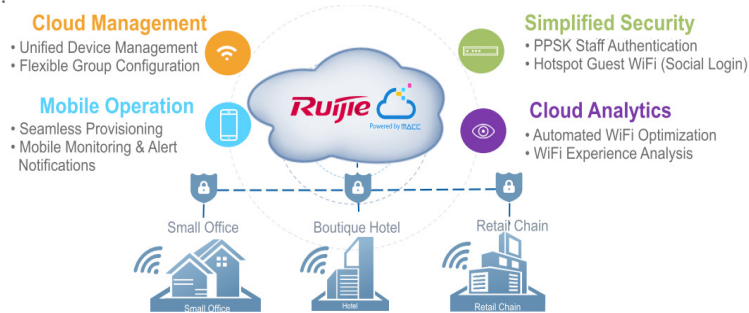| Model		Ruijie AP730-L	Ruijie AP720-L	Ruijie AP710	Ruijie AP210-L
Target Deployment		SME High Density Wi-Fi	Retail Chain Store, Small & Medium-sized Business Office, Boutique Hotel		
Type		Indoor Ceiling/Wall-mounting			
Basic Spec	Radio	Tri-band (2.4G+5G +5G)	Concurrent Dual-band		Single-band
	Protocol	802.11a/b/g/n/ac Wave2		802.11a/b/g/n/ac	802.11b/g/n
	Operating Bands	802.11b/g/n: 2.4GHz to 2.483GHz 802.11a/n/ac: 5.150GHz to 5.350GHz, 5.47GHz to 5.725GHz, 5.725GHz to 5.850GHz (vary depending on countries)			802.11b/g/n: 2.4GHz to 2.483GHz
	Antenna	Built-in Antenna			
	Max Throughput	2130Mbps	1167Mbps	1167Mbps	300Mbps
	Spatial Streams	2x2	2x2	2x2	2x2
	Maximum Transmit Power	100mW			
	IP Rating	IP41			
Ports		1 10/100/1000 BASE-T Ethernet uplink Port LAN1 supports PoE+ 1 Console Port	1 10/100/1000BASE-T Ethernet uplink Port LAN1 supports PoE 1 Console Port (Micro USB)		1 10/100 BASE-T Ethernet uplink Port LAN1 supports PoE 1 Console Port (Micro USB)

Power	Power Supply	local power supply (DC 48V/0.6A) PoE (802.3at)	local power supply (DC 5V/3A) PoE (802.3af)	local power supply (DC 12V/1A) PoE (802.3af)
	Power Consumption	<25.5W	<12.95W	<7.5W
WLAN	Maximum clients per AP	768	256	128
	BSSID capacity	48	32	16
	Remote Intelligent Perception Technology (RIPT)	Support		
	Intelligent load balancing based on the number of users or traffic	Support		
	STA control	Support		
	Bandwidth control	Support		
	Band Steering (5G Priority)	Support		N/A
Security	PSK, Web, 802.1x authentication	Support		
	PPSK authentication	Support		N/A
	Data encryption	WPA (TKIP), WPA2 (AES), WPA-PSK, and WEP (64 or 128 bits)		
	PEAP authentication	Support		
	User isolation	Support		
	Rogue AP detection and countermeasure	Support		
	RADIUS	Support		
	Wireless Intrusion Detection System(WIDS)	Support		
	Wireless Intrusion Prevention System (WIPS)	Support		

Routing	IPv4 address	Static IP address or DHCP reservation		
	IPv6 address	Manual or automatic configuration		
	Multicast	Multicast to unicast conversion		
Management and Maintenance	Network management	SNMP v1/v2C/v3, Telnet, TFTP, Web management		
	Cloud AC management	Support		
	FAT/FIT switching	Support		
External Characteristics	Lock	Support		
	LED Indicators	1 LED indicator (red, green, blue, orange, and flashing modes, breathing flashing mode for smart device access, and the indicator can be switched off to enable silence mode)		
Relevant Standard	Wi-Fi Alliance Certification	Support		
	Radio Standard	EN300 328 EN301 893		
	EMC Standard	GB9254 EN301 489-1 EN301 489-17		
	Safety Standard	GB4943 EN/IEC 60950-1		
Specifications	Dimensions (W x D x H) (mm)	230x230 x42	194 × 194 × 37	175*175 *25.8
	Weight	1.3kg	0.42kg	0.35kg
Work Environment	Temperature	Operating Temperature: -10° C to 50° C Storage Temperature: -40° C to 70° C		Operating Tempera -ture: -10° C to 45° C Storage Tempera -ture: -40° C to 70° C
	Humidity	Operating Humidity: 5% to 95% (non-condensing) Storage Temperature: 5% to 95% (non-condensing)		

Application Scenarios

1. Ruijie Cloud

Ruijie SME AP series is designed for the simplicity and ease of use application in many SME scenarios including small offices, boutique hotel, retail store and etc. 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.
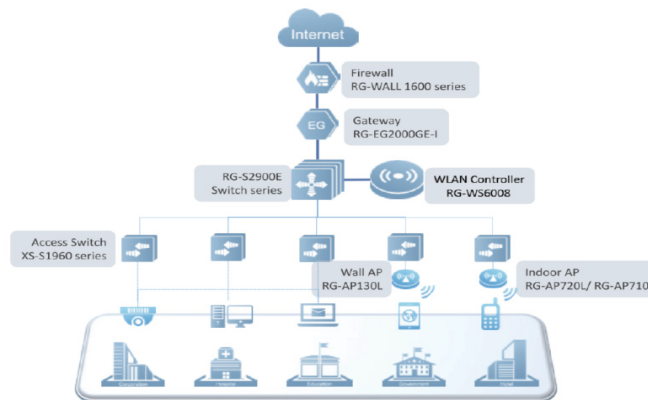
Cloud Management
• Unified Device Management
• Flexible Group Configuration

Simplified Security
• PPSK Staff Authentication
• Hotspot Guest WiFi (Social Login)

Mobile Operation
• Seamless Provisioning
• Mobile Monitoring & Alert Notifications

Cloud Analytics
• Automated WiFi Optimization
• WiFi Experience Analysis

Small Office   Boutique Hotel   Retail Chain

Ruijie Cloud Solution Highlights

2. Hardware Controller

For higher performance or stringent security scenarios, Ruijie offers the on-premise hardware controller option for flexible management. Ruijie provides comprehensive cost-effective enterprise-grade network solution to SME market, consisting of switches, wireless, gateways, security, etc. The solution provides customers with scenario-based AP options (indoor/wall AP), flexible WLAN management, reliable switch design with conformal coating protection, Layer 7 application protection and web filtering.

Ruijie WS6008 can be deployed as the wireless controller which simplifies the management of your wireless network by serving as a single point of management for all the access points in the network. Ruijie WS6008 supports up to maximum of 200 manageable access points, hence it increases the scalability and ensures your IT investment protection. Ruijie WS6008 offers full range of enterprise Wi-Fi features including rouge AP mitigation, automated Wi-Fi optimization (WIS), flexible authentication modes (web authentication, 802.1X), etc.

Internet

Firewall
RG-WALL 1600 series

Gateway
RG-EG2000GE-I

RG-S2900E
Switch series

WLAN Controller
RG-WS6008

Access Switch
XS-S1960 series

Wall AP
RG-AP130L

Indoor AP
RG-AP720L/ RG-AP710

Comprehensive Solution for SME Market

Ordering Information

Model	Description
RG-AP730-L	Indoor 802.11ac Wave 2 Access Point, Tri-band (2.4G+5G+5G), 2 spatial streams, access rate up to 2.130Gbps, 1 10/100/1000BASE-T uplink port; Bundled with Ruijie Cloud Service lifetime license (PoE and local power adapters sold separately)
RG-AP720-L	Indoor 802.11ac Wave 2 Access Point, dual-radio, dual-band, 2 spatial streams, access rate up to 1.167Gbps, 1 10/100/1000BASE-T uplink port; Bundled with Ruijie Cloud Service lifetime license (PoE and local power adapters sold separately)
RG-AP710	Indoor 802.11ac Access Point, dual-radio, dual-band, 2 spatial streams (2.4GHz), access rate up to 1.167Gbps, 1 10/100/1000BASE-T uplink port; Bundled with Ruijie Cloud Service lifetime license (PoE and local power adapters sold separately)
RG-AP210-L	Indoor 802.11n Access Point, 2 spatial streams (2.4GHz), access rate up to 300Mbps, 1 10/100BASE-T uplink port; Bundled with Ruijie Cloud Service lifetime license (PoE and local power adapters sold separately)
Optional	
RG-WS6008	WS Series Wireless Controller, 6 1000BASE-T ports, 2 1000BASE-T/1000BASE-X ports (combo), 32 APs License by default, maximum 200 APs or 400 Wall APs License

Ruijie