
HAFS
Distributeur à valeur ajoutée
VOTRE PARTENAIRE TECHNOLOGIQUE
POUR DES INFRASTRUCTURES IT SÉCURISÉES ET PERFORMANTES
EXPERTISE
Des solutions adaptées à chaque environnement
CONFIANCE
Un partenaire fiable à vos côtés
PERFORMANCE
Des infrastructures sécurisées et évolutives
SUPPORT
Un accompagnement technique de qualité
HAFS
Distributeur à valeur ajoutée
Des solutions IT innovantes pour un monde connecté et sécurisé
WIRELESS RADIO
Connectivité sans fil haute performance
RÉSEAUX & SÉCURITÉ IT
Des réseaux fiables et sécurisés
VIRTUALISATION CLOUD
Des solutions Cloud flexibles et évolutives
CYBERSECURITY
Protéger vos données et vos systèmes
VIDÉO PROTECTION
Solutions de vidéosurveillance intellligentes
HCI STOCKAGE SAUVEGARDE
Stockage, sauvegarde et haute disponibilité
SOLUTIONS IT | CYBERSÉCURITÉ | CLOUD | INFRASTRUCTURE RÉSEAU | STOCKAGE | PROTECTION

INNOVATION
Beyond Networks

Ruijie Enterprise-Class Wireless Products

Redefine User Experience with Secure and Reliable Network



Ruijie: Enterprise WLAN Market Leader in China



No.1

2021-2022

Product shipments in China's enterprise-class WLAN market

Source: IDC 2022Q4



No.1

2019-2022

Wi-Fi 6 product shipments in China's enterprise-class WLAN market

Source: IDC 2022Q4



No.1

2021-2022

Education and service industry market share in China

Source: IDC 2022Q4



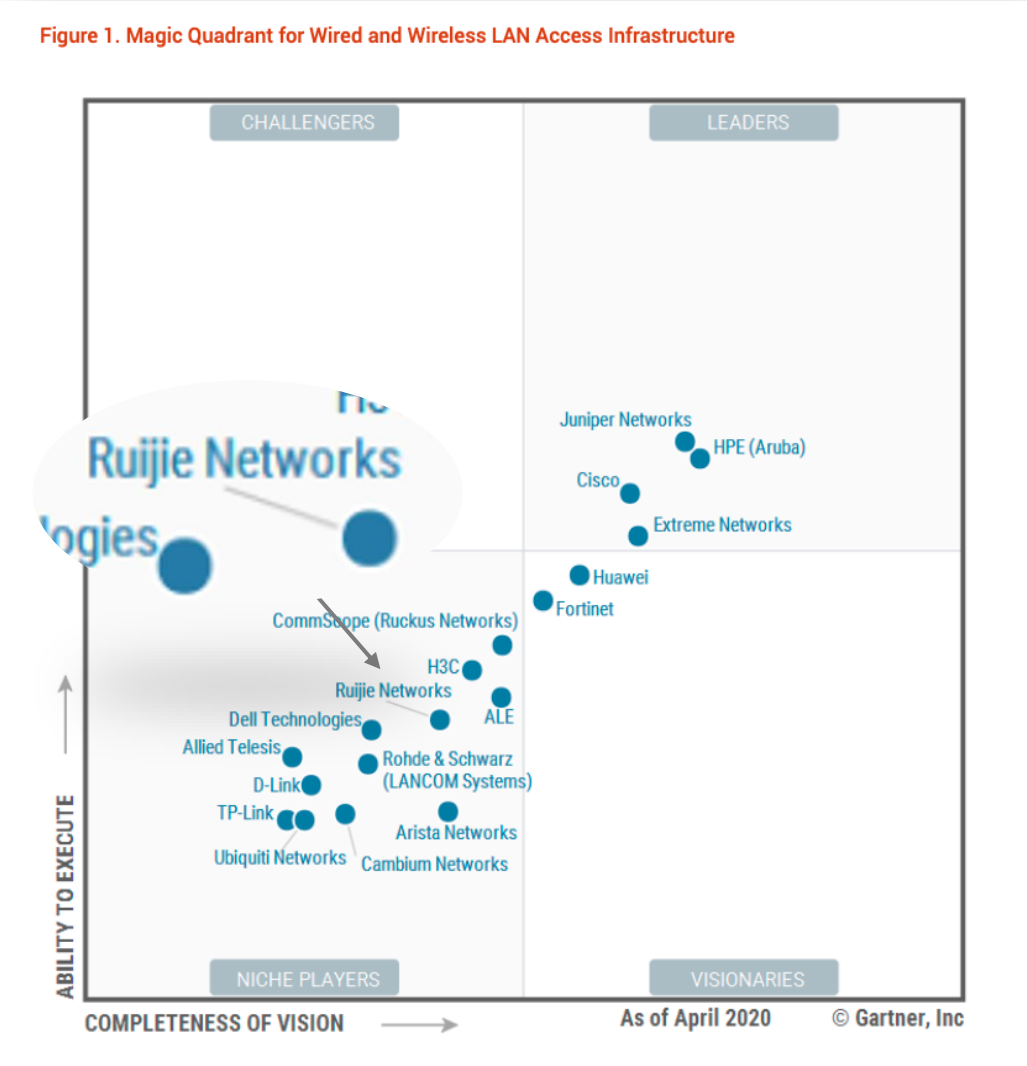
No.1

2021-2022

Active device volume in **cloud management**

Source: CCW 2022Q4

Global Acknowledgement



Gartner®

- Highly recommended by Gartner
- Aggressive cloud management strategy
- Advanced network technologies

Source: Gartner MQ Report

IDC

- Top 3 network vendors in China
- No.1 growth in global WLAN market share

Source: Tracking Report on IDC 2022

No.1 Growth in Global WLAN Market Share in 2022

Ruijie Networks 锐捷

Growth rate
77.9%



Data source: IDC China's WLAN Market Summary 2022

Business and Product Positioning

Customer Portrait

- 1,000 to 10,000 employees
- 4/5-star hotels
- Local banks
- Public sectors and state-owned enterprises

- 200 to 1,000 employees
- Chain hotels
- Chain retail
- Manufacturing

- 10 to 200 employees
- Boutique hotels
- Local retail

- 10 employees
- Small Office/Home Office (SOHO) business

Partner Level



Competitors

cisco
cisco Meraki
Mist
A Juniper Company
aruba
a Hewlett Packard Enterprise company
aruba Instant On
HUAWEI
RUCKUS
an ARRIS company
Extreme networks
Cambium Networks

tp-link
D-Link

Brand Positioning

Ruijie

Ruijie | Reyee

Enterprise-Class WLAN

Definition

Enterprise-class WLAN access devices are designed for use in multi-access point (AP) systems or for standalone deployment and typically have **a rich and upgradeable feature set.**

Source: IDC's Worldwide ICT Spending Guide by Industry and Company Size Taxonomy, 2021 Release V2, 2021

Similar CLI-based operation

Enterprise
Chipset & Hardware

Enterprise
Certified Technology

Enterprise
Operating System

MediaTek
Realtek

Basic
Certification

Open WRT
System

Enterprise Certification Enables Diverse Applications

Wi Fi 6 CERTIFIED



China shows leadership in citywide Wi-Fi CERTIFIED™ deployments

The smart city of the future depends on Wi-Fi®

Extensive metro network coverage of 705 km delivered by Ruijie access points

facturers trust IED™ for critical functions

se manufacturing efficiency

200 access points to provide Wi-Fi coverage for industrial production line

Universities in China embrace Wi-Fi

Chinese universities experience the benefits of Wi-Fi 6

than a million packages per day

13,000 access points deployed in Northeastern University



Enterprise WLAN Performance

Ruijie Enterprise WLAN Solution – Campus Network

Highlights

- Local AC Management
- Local access authentication integration
- High availability and zero downtime
- Cloud access for remote management



Campus network



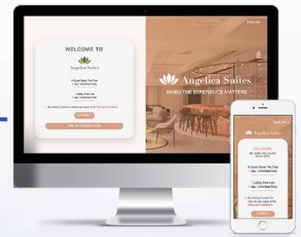
Gateway



Switch



Wireless access controller
RG-WS6008
RG-WS6512-L



Third-party external captive portal

PoE+ PoE PoE PoE



RG-AP840-L



RG-AP820-L(V3)
RG-AP810-L



RG-AP180
RG-AP180P-L

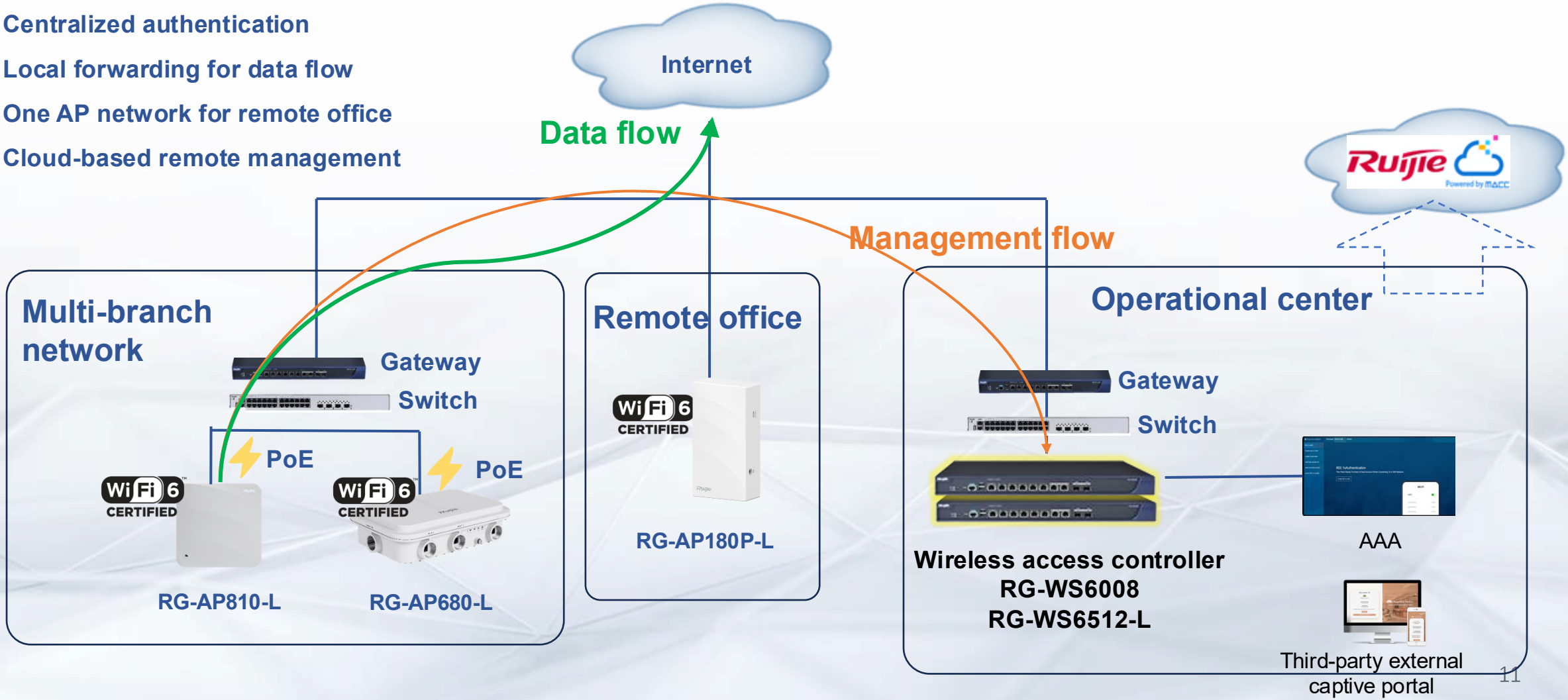


RG-AP680(CD)
RG-AP680-L

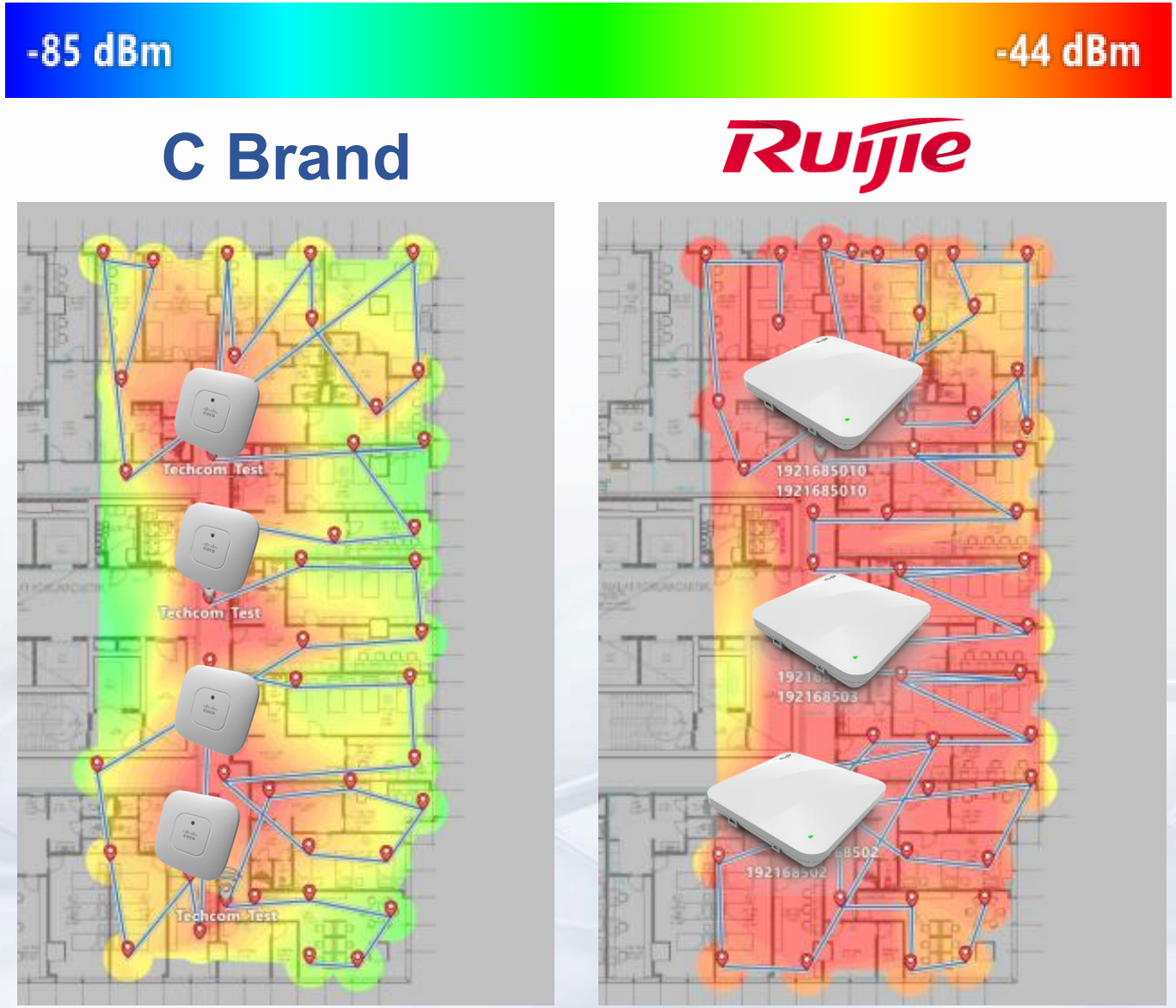
Ruijie Enterprise WLAN Solution – Multi-Branch Network

Highlights

- Centralized management
- Centralized authentication
- Local forwarding for data flow
- One AP network for remote office
- Cloud-based remote management



Performance Features – Full Wi-Fi Coverage



Top brand coverage

Best coverage tested

Before	After
4 APs	3 APs
–75 dBm	–60 dBm

Performance Features – Full Wi-Fi Coverage

Ruijie Smart Antenna

MU-MIMO + Beamforming
Service consistency in the case of client mobility

MU-MIMO supported models:
RG-AP820-L(V2), RG-AP840-L, RG-AP680(CD) , and RG-AP180



X-Sense supported model:
New-generation Wi-Fi 7 RG-AP9860

X-Sense smart antenna

Before

Signal coverage hole

Failure to expand due to budget limits

After

CAPEX savings

- **Fewer devices** needed to achieve the same coverage
- Cost reduced by **20%**
- **1.5 times** signal coverage
- **Guaranteed –65 dBm RSSI** throughout the coverage area

Enhanced efficiency

- Full coverage with **no signal coverage hole**
- Flexible connection to **any AP**

Performance Features – High-Density and High-Standard Testing Model



Lab testing

200 users 1080P video High concurrency 8 Mbps actual speed

A Brand

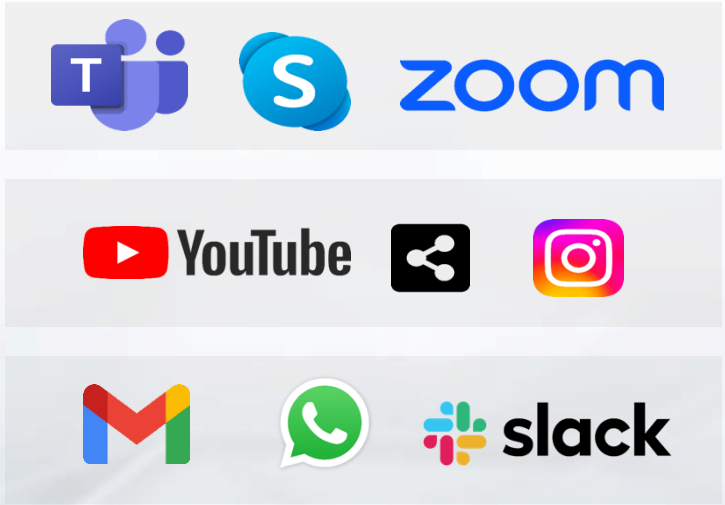
Technology	
ClientMatch	CorrectLink
AirMatch	RRM2.0
AirSlice	Application-based QoS

C Brand

Technology	
AirMarshal	WIDS/Rogue detection
ClearAir	WIS Pi experience analysis

Supported models:
RG-AP810-L, RG-AP820-L(V2), RG-AP820-L(V3), RG-AP840-L, RG-AP180, RG-AP180P-L, RG-AP680(CD), and RG-AP680-L

Application-based QoS



Priority queue

BW queue

Best-effort queue

Deep Packet Inspection (DPI) **Quality of Service (QoS)**

DPI supported models (Released in July 2023 version update)
RG-AP810-L, RG-AP820-L(V2), RG-AP820-L(V3), RG-AP840-L, RG-AP180, RG-AP180P-L, RG-AP680(CD), and RG-AP680-L
QoS supported models:
RG-AP720-L, RG-AP810-L, RG-AP820-L(V2), RG-AP820-L(V3), RG-AP840-L, RG-AP180, RG-AP180P-L, RG-AP680(CD), and RG-AP680-L

Before

Complaints about poor user experience

Ad-hoc maintenance provided by IT team for high-density events

After

Efficiency improvement

- Experience optimization for **all clients**

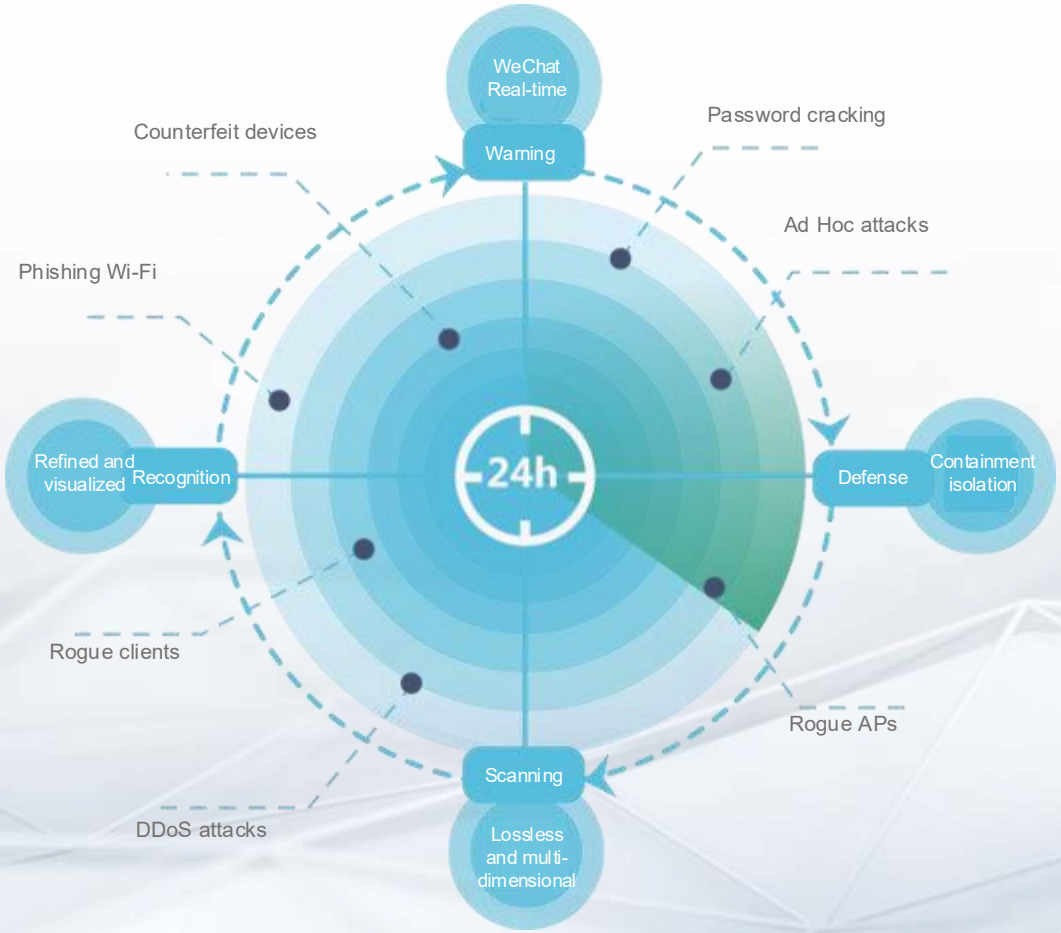
OPEX savings

- Bandwidth assurance for concurrent users, eliminating the need for dedicated on-site technical support
- Operation cost reduced by **50%+**



Enterprise WLAN Security

Radio Interference and Rogue AP Detection



Radio security scanning in monitoring mode, ensuring 24/7 uninterrupted performance.
Full-band scanning, exposing all security risks.

Detection and classification of wireless signals
Rogue AP detection and containment
Real-time visualization and alarm

Wi Fi
WPA3

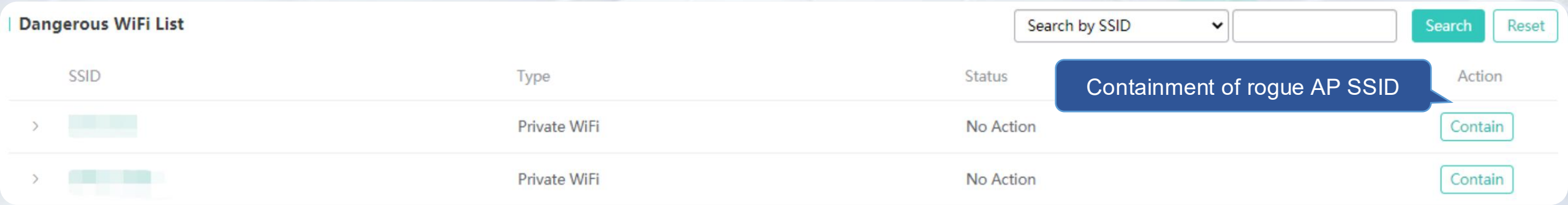
Ruijie Wi-Fi 6 products fully comply with WPA3 encryption standard, providing data security assurance for customers.

Radio Interference and Rogue AP Detection



Intelligent Security Guard





What fine-grained policy can you assign to your network?



Wednesday afternoon



Any student



Connecting from dormitory

Internal campus access only — Access control

Rate limit: 10 Mbps — Bandwidth control

IP pool allocation — VLAN control

Implementing policy with detailed control with Ruijie NAC

What Profile Are You

Username: James

↓ Identity match: Student

Connected AP: AP-RM101

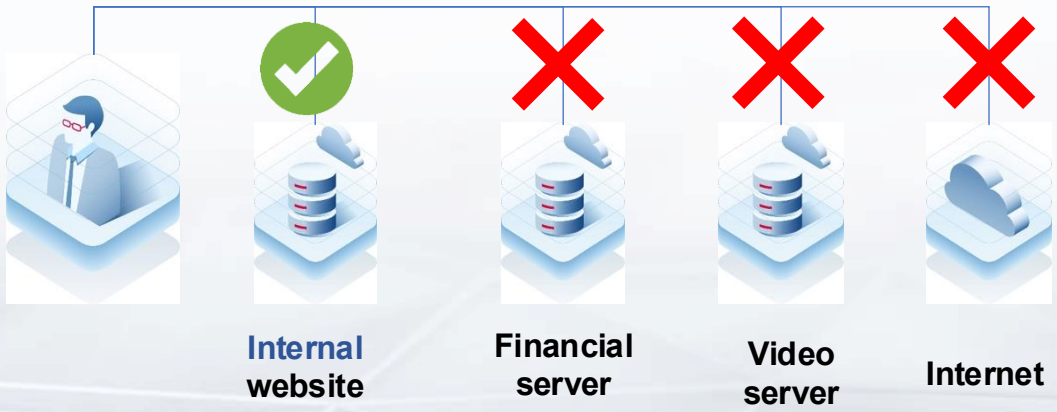
↓ Location match: Dorm

Time of Connection: 14:15

↓ Time match: 12:00 to 18:00 on Wednesday

What Can You Do

Your access control



Your rate limit: 10 Mbps

Your VLAN allocation: 10.11.xxx.xxx

One Office SSID, Dynamic Policy

Before

10 SSIDs

10 policies

- SSID: Engineer → Policy for Engineer
- SSID: Finance → Policy for Finance
- SSID: HR → Policy for HR
- SSID: Sales → Policy for Sales
- SSID: Admin → Policy for Admin
- And More → Policy for More

After

1 SSID

Unlimited policies

SSID: Office

- Policy for Engineer
- Policy for Finance
- Policy for HR
- Policy for Sales
- Policy for Admin
- Policy for More

IoT Devices NOT Supporting Web Portal



IoT devices including smart watch, game console, personal printer and personal screen

- NOT support web portal
- On the same personal network as the phone/laptop
- No other wireless connection options (only Wi-Fi available)



Portal is not supported.



Hospitality case requirement:

Customers want to **cast game consoles and laptops to TVs in the hotel.**



Education case requirement:

Students want to use **printers with laptops through** managed Wi-Fi in the dormitory.

UPSK Supporting Personal Network

Before

Global password for everyone's devices

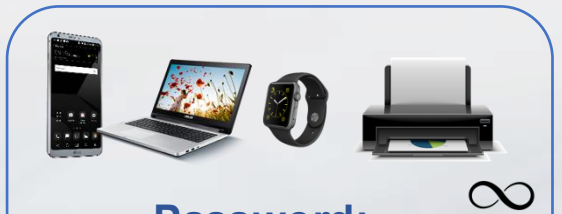


Password: Office123

Not safe
No policy

After

Per-user PSK for all devices of one user



Password: 101James



Password: 102Frank

x2000

Policy: Personal network
Mutual connection between devices

Unlimited device per segment

Policy: User isolation

2,000 segments (UPSK) per access controller

Safe and simple
Protection with per-user policies

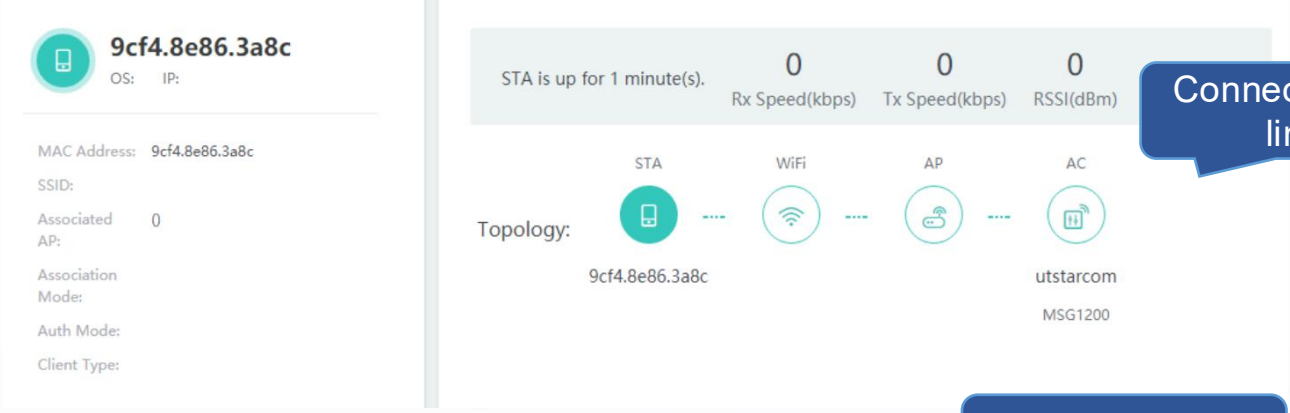


Enterprise WLAN Reliability

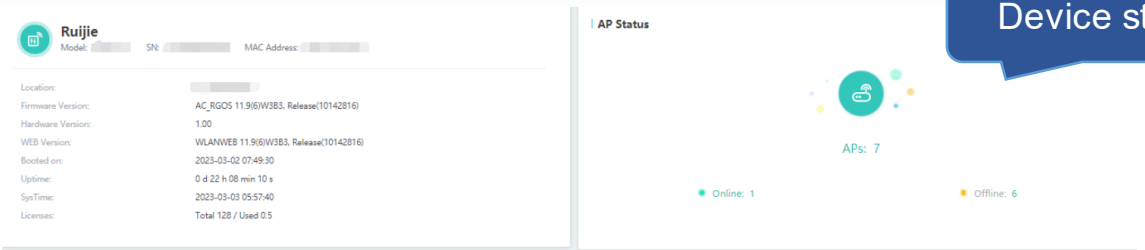
Reliability Features – High Availability and Zero Downtime

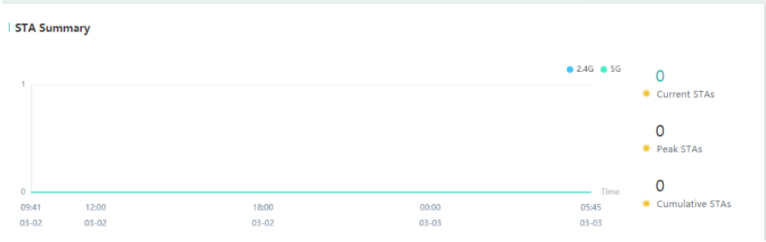
GUI-based network monitoring

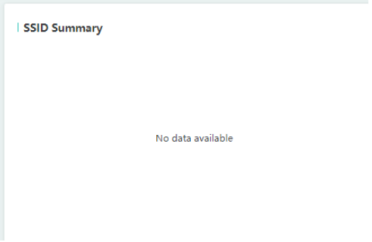
Connection and links

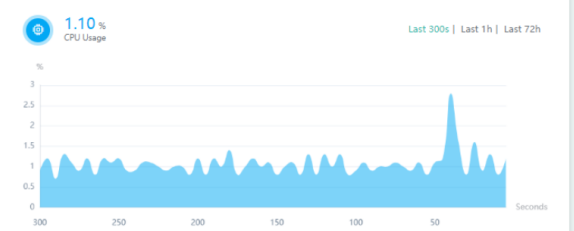


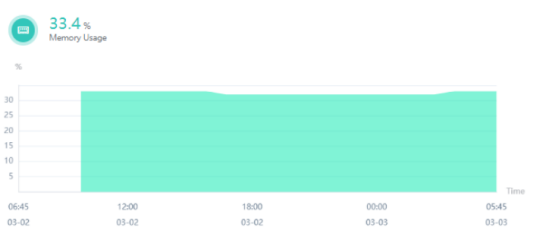
Device status











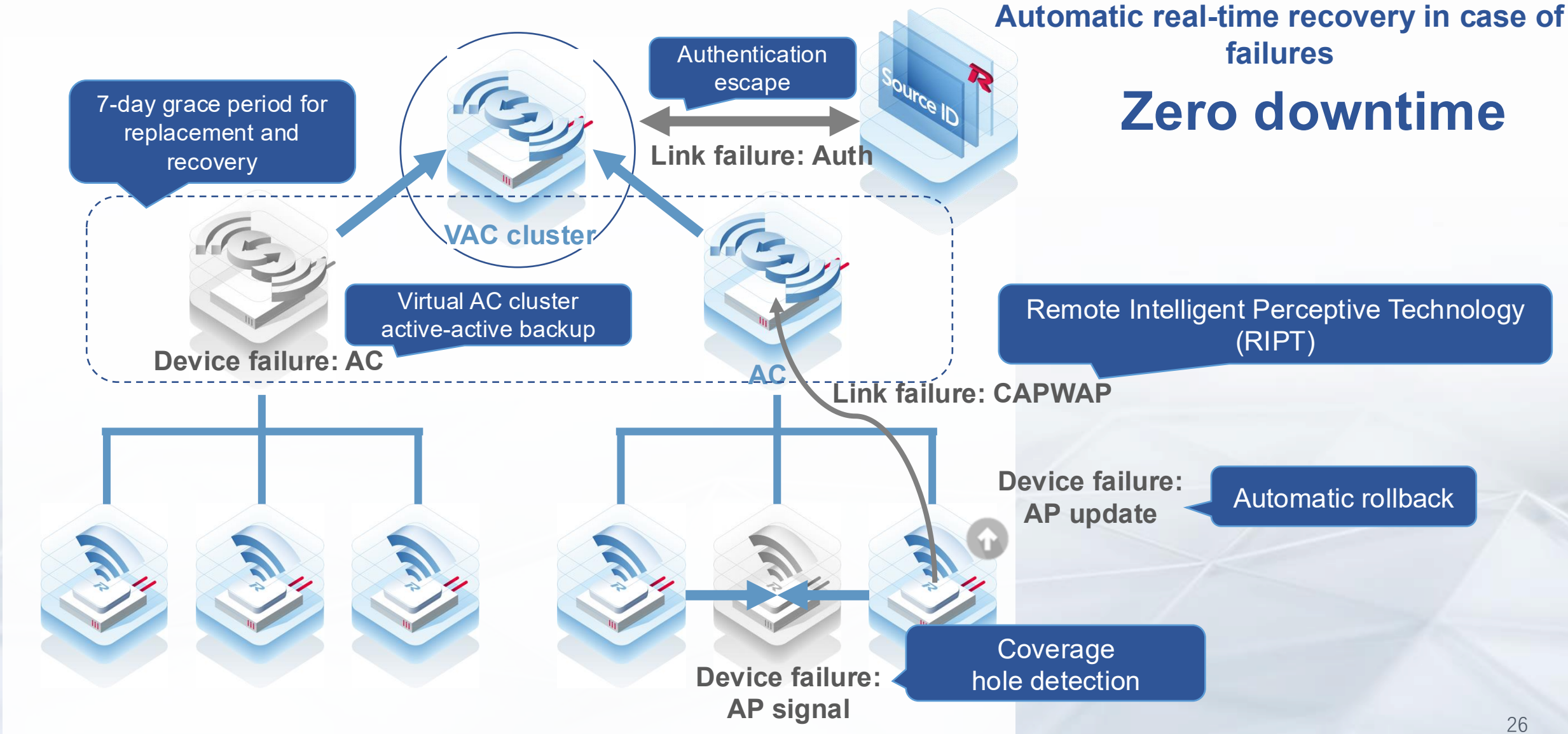
Device update



Device status



Reliability Features – High Availability and Zero Downtime





Product Portfolio

Ruijie Enterprise WLAN Product Portfolio

Indoor AP



RG-AP840-L
High-density and high-performance 4x4



RG-AP820-L(V3)
Indoor general coverage



RG-AP820-L(V2)
Lightweighted indoor AP



RG-AP810-L
Cost-effective AP



RG-AP880-L
Wi-Fi 6E Tri-Radio



RG-RAP73Pro
Wi-Fi 7 Tri-Radio

Outdoor AP



RG-AP680-L
Outdoor
General omnidirectional

- Throughput: 2.976 Gbps
- 4SS 2+2
- 1GE SFP port
- 1GE RJ45 port
- Built-in omnidirectional antennas



RG-AP680(CD)
Outdoor
Cost-effective directional

- Throughput: 1.775 Gbps
- 4SS 2+2
- 1GE SFP port
- 1GE RJ45 port
- Built-in directional antennas

Wall-plate AP



RG-AP180P-L
Premium wall-plate AP



RG-AP180
Cost-effective wall-plate AP



RG-RAP72-Wall
Wi-Fi 7 wall-plate AP



RG-RAP62-Wall Series
Wi-Fi 6 wall-plate AP

AC



RG-WS6512-L
At least 1152 managed APs



RG-WS6008
At least 224 managed APs



RG-WS6012
At least 448 managed APs

RG-AP680-L, Designed for Beach Scenarios

Built-in omnidirectional antennas



Wi-Fi 6
AX3000

SFP Port

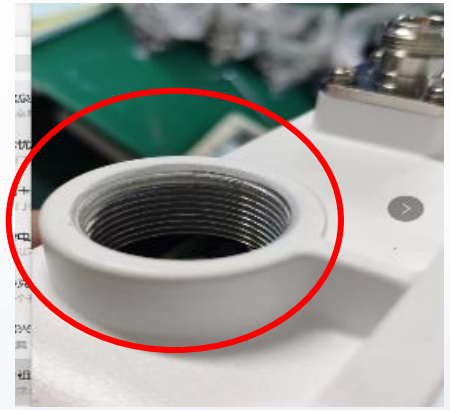
IP68

Salt spray
corrosion proof

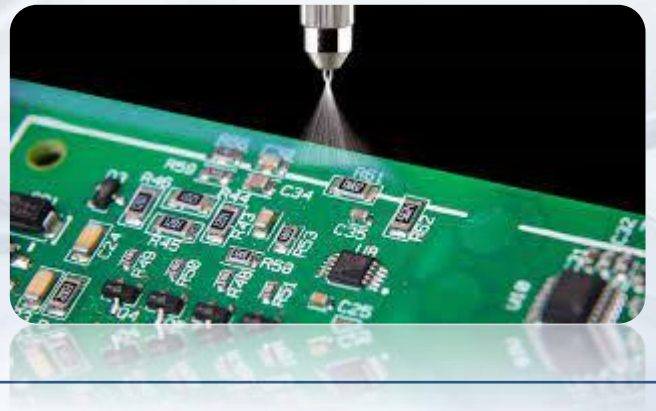
Salt Spray Proof Specifications Higher than IP68

Special design for Salt spray corrosion proof





Special conformal coating



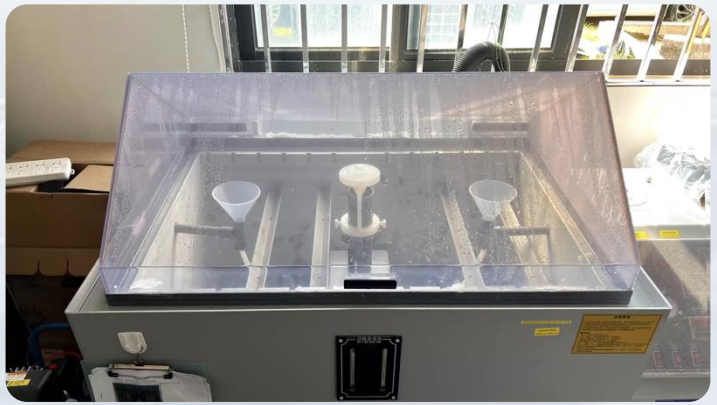
Salt spray corrosion test

Salt spray concentration: 5%

Test temperature: 35ºC (95°F)

Spray volume: 1–2 mL/hour/80 cm^2

pH value: 6.5–7.2



Wall-Plate AP for All Countries



RG-AP180P-L

Wi-Fi 6
2.976 Gbps

2.5 Gbps
Uplink

4 x 1GE LAN
(1 x PoE-out port)

Wall-plate
design



Dormitory & apartment



Hotel room

Build a full multi-GE network with Ruijie switches



RG-CS86 series
Multi-GE switch

Flexible Installation

Suitable for various junction boxes or flat wall installation



RG-AP180P-L

RG-RAP73Pro



Performance	BE14000
Dimensions	220 mm x 220 mm x 45 mm (8.66 in. x 8.66 in. x 1.77 in.)
Frequency Bands & MIMO	2.4 GHz + 5 GHz + 6 GHz 2x2 + 3x3 + 3x3
Max. Users	600
Rec. Users	200
Ports	1x 2.5 GE and 1 x SFP+
Power Supply	802.3at PoE, 54 V DC power supply

RG-RAP72-Wall



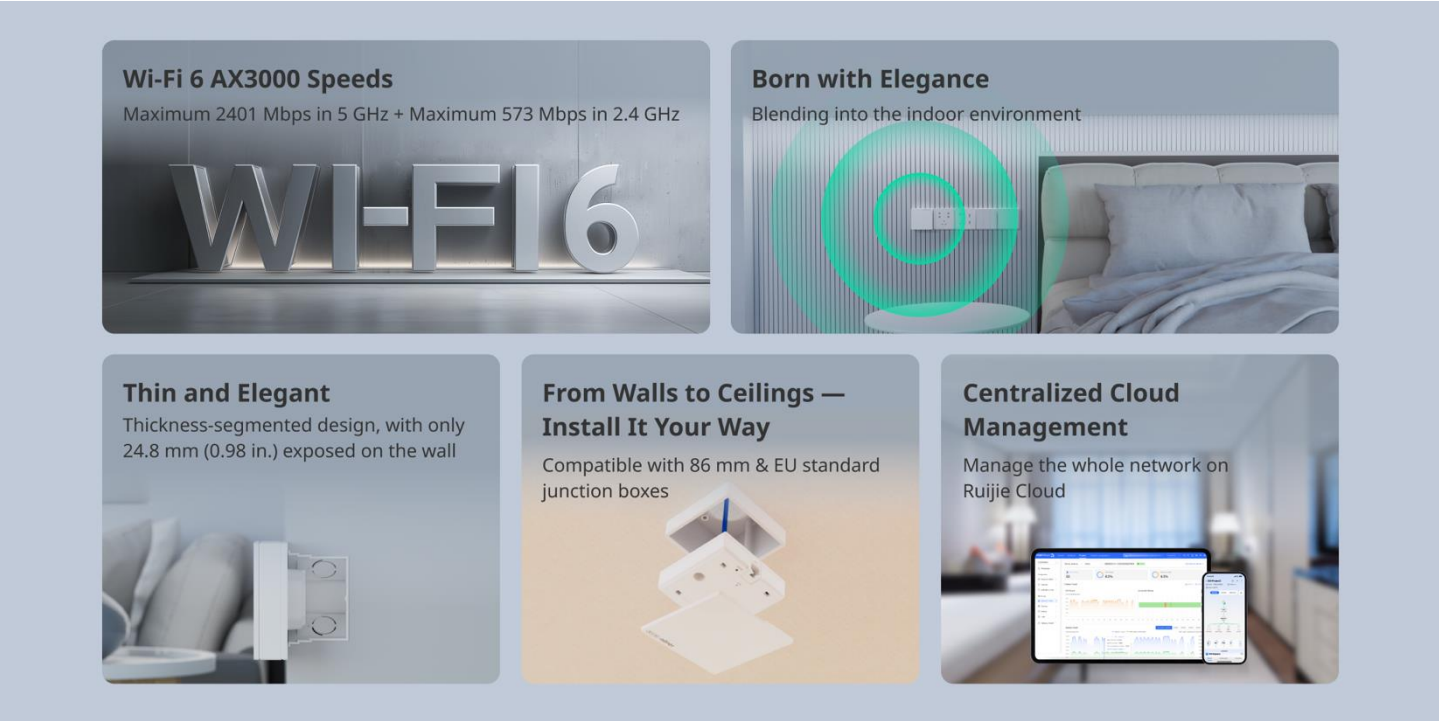
Model	RAP72-Wall
Throughput	BE3600 (2.4 GHz: 2x2, 5 GHz: 2x2)
Dimensions	124 mm x 86 mm x 24 mm (4.88 in. x 3.39 in. x 0.94 in.)
Ethernet Ports	1 x 2.5G RJ45 port (PoE-In) 4 x 1G RJ45 ports (1 port supports 802.3af-compliant PoE output)
Power Supply	IEEE 802.3af/at
Rec./Max. Clients	110/511
Power Out	1 port supports PoE output. IEEE 802.3at power supply: standard PoE output IEEE 802.3af power supply: PoE output not supported
Coverage Radius	25 m (82.02 ft.)

RG-RAP62-Wall



Model	RG-RAP62-Wall
Dimensions (W x D x H))	86 mm x 23.5 mm x 125 mm (3.39 in. x 0.93 in. x 4.92 in.)
Spatial Streams	2.4 GHz: 2x2 MU-MIMO 5 GHz: 2x2 MU-MIMO
Max Throughput	AX3000
Antennas	Omni Directional 2.4GHz: 4.08dBi 5GHz: 5.4dBi
Maximum Transmit Power	Combined power of 2.4 GHz & 5 GHz: 21 dBm (single-stream power: 18 dBm)
Concurrent Clients	Max: 256
Recommended Wi-Fi Coverage	55 ㎡ (592.02 ft^2)
Service Ports	WAN: 1 x 1 Gbps RJ45 (PoE In) LAN: 4 x 1 Gbps RJ45 (1 port supporting 10 W PoE Out)
Power Consumption	12 W (excluding PoE output)

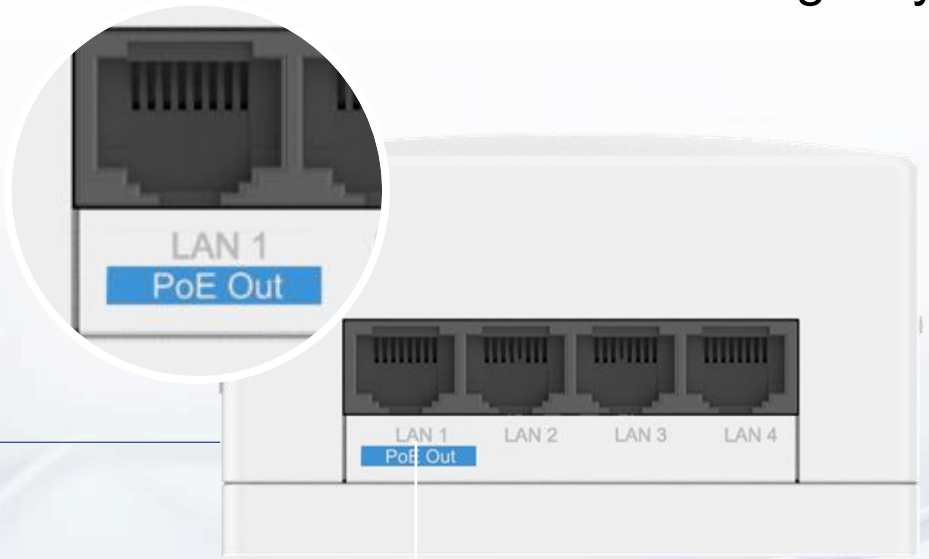
RG-RAP62-Wall-Lite



Model	RAP62-Wall-Lite
Dimensions (W x D x H)	86mm x 38mm x 86mm (3.39 in. x 1.50 in. x 3.39 in.)
Spatial Streams	2.4 GHz: 2x2 MU-MIMO 5 GHz: 2x2 MU-MIMO
Max Throughput	AX3000
Antennas	Omnidirectional 2.4 GHz: 3.07 dBi 5 GHz: 4.42 dBi
Maximum Transmit Power	Combined power of 2.4 GHz & 5 GHz: 21 dBm (single-stream power: 18 dBm))
Concurrent Clients	Max: 256
Recommended Wi-Fi Coverage	45 m^2 (484.38 ft^2)
Service Ports	WAN: 1 x 1 Gbps RJ45 (PoE In) LAN: 1 x 1 Gbps RJ45
Power Consumption	11.2 W

In Compliance with Star Hotel Standards

RG-AP180P-L supports PoE out for IP phones, allowing guests to make emergency calls in case of power outage*.



UPS

RG-AP180P-L



** UPS is usually installed for network devices in star hotels.*

Enterprise Campus Wireless AC



High-speed forwarding

- 40 Gbps forwarding capacity
- 4 x SFP+ ports and 8 x 1GE ports

Large management capacity

- Manage up to **1152** APs (or 2304 wall-plate APs)

High Availability

- RIPT technology (AC bypass)
- VAC license sharing

Build an Expert Network with Hardware AC

Why do some customers need hardware AC?



On-premise control

Government, bank, factory, etc.



Local and faster authentication

School, staff dormitory, etc.



Better roaming experience

Lower roaming latency



Monitoring and security policy

Centralized forwarding mode

Ruijie AC Portfolio



WS6816 VAC



WS6816



WS6512-L VAC



WS6512-L



WS6008 VAC



WS6012



WS6008

High compatibility

- SNMP management
- Third-party authentication API
- …

AP management capacity 200 500 1000 2000 3000 4000 10000

Features for Managed Service Partners

Easy Management on Ruijie Cloud

- Real topology
- Wi-Fi configuration
- Traffic monitoring
- Remote troubleshooting



Power Consumption Comparison

Wi-Fi 6 AX1800/AX3000 indoor/outdoor models

Other Brand	Ruijie
IEEE 802.3at	IEEE 802.3af
15 W to 25 W	< 12.95 W
PoE+ power injector required	PoE standard power injector required
High-power PoE+ switch required	Standard PoE switch

Better TCO
Less Carbon Footprint

- Savings in electricity
- Savings in accessory
- Savings in solution



Best Return of Interest with Enterprise Quality and Service

Enterprise Software Brings Lifetime Reliability

RGOS® 15 Years of Evolution and Proof of Reliability



Dual-boot/firmware backup → Process failure self-recovery



High availability design → Zero downtime



NFPP and CPP → Malicious data blocking and risk protection

IEEE Advancing Technology for Humanity

Contributions

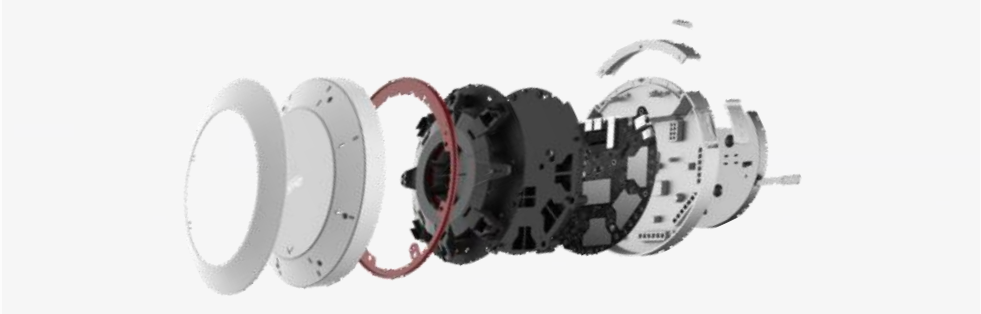
Full compliance with and constant contribution to IEEE 802.11 standards & IETF RFC standards

IETF®

Enterprise Performance Brings High Efficiency

First Commercially Available Wi-Fi 6 Access Point in the Industry

RG-AP880 series AP provides a single-user throughput of 4 Gbps and is the fastest Wi-Fi device that Tolly Group has ever tested.



Tolly Group



"The fastest Wi-Fi access point"

——Kevin Tolly

Industry-Leading Wireless Zero-Roaming Technical Solution

The wireless zero-roaming technology ensures 24/7 uninterrupted mobile production services.

TEST REPORT

Tolly.

#222133ZH

June 2022

Commissioned by Ruijie Networks Co., Ltd.

Ruijie WLAN Products

Roaming Performance Evaluation in Multiple Scenarios

The zero-roaming performance of Ruijie products used in multiple scenarios has passed the test and evaluation conducted by Tolly Group.

Wireless zero-roaming performance in the industrial production scenario	Wireless zero-roaming performance in the medical scenario	Wireless zero-roaming performance in the office scenario	Wireless zero-roaming performance in the rail transit scenario
STA speed: 1.5-2m/s	STA speed: 1.4m/s	STA speed: 1.4m/s	STA speed: 17m/s
Number of lost packets: < 1 Packet loss rate: ≤ 0.5% Average latency: 10 ms	Number of lost packets: 0 Packet loss rate: ≤ 0.25% Average latency: 50 ms	Packet loss rate: ≤ 0.5% Average latency: < 30 ms	Packet loss rate: < 0.1% Latency: < 1 ms



AGV handling in workshops and warehouses



Doctors use tablet computers for ward rounds.

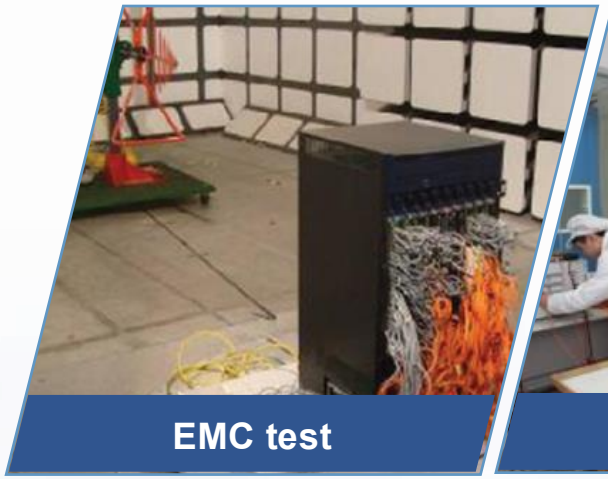


Mobile office videoconferencing



Vehicle-ground communication of rail transit PIS

Enterprise-Class Testing Brings Lifetime Reliability



EMC test



EMI surge test



Temperature test

MTBF > 200,000 hours



Integration test

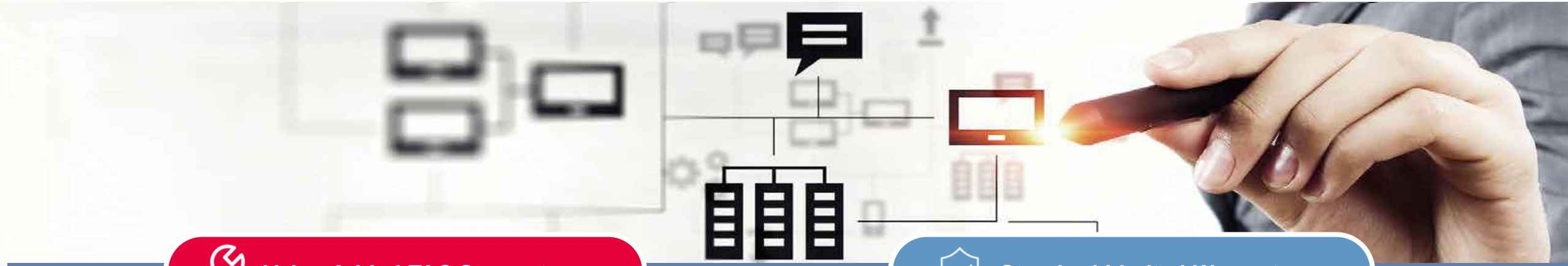


Drop test



WLAN load test

Technical Service and Warranty



Value-Added TAC Support

- Professional and complimentary TAC support is available for all Ruijie‘s partners and customers.
- Staffed by Ruijie certified experts, Ruijie TAC provides technical support for products, configuration and troubleshooting, and incident management.
- Ruijie TAC provides 14/7 support on case portal, online call/live chat or email as well as 24/7 support on smart bot and emergency hotline.

Standard Limited Warranty

- Default 3-year free of charge (FOC) warranty for all hardware and software.
- Upgrade to 5-year limited lifetime warranty

- * Please contact a local Ruijie representative or visit Ruijie's official website for updated service-related enquiries.



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