

INNOVATION Beyond Networks

# RG-RAP72-Wall

# BE3600 Dual-Band Wall-Mount Wi-Fi 7 Access Point

Rujie (Wi-Fi7)

Datasheet

### 01 Product Overview

The RG-RAP72-Wall is a dual-band Wi-Fi 7 wireless access point (AP) launched by Ruijie Networks. Compliant with the IEEE 802.11be standard, the RG-RAP72-Wall is ideal for guest rooms in hotels and apartments, classrooms and dormitories in education sector, as well as office environments for small- and medium-sized enterprises.

The RG-RAP72-Wall can operate simultaneously in IEEE 802.11be, IEEE 802.11ax, IEEE 802.11ac Wave 2, IEEE 802.11ac Wave 1, and IEEE 802.11n modes. It supports both the 2.4 GHz and 5 GHz bands, delivering a data rate of up to 3.57 Gbps.

The RG-RAP72-Wall integrates essential functions such as wireless network security, a standalone portal, Reyee Mesh, QoS, and seamless roaming. It can work in conjunction with Ruijie Cloud to enable wireless client access control, operations and maintenance (O&M), and security access management.

The RG-RAP72-Wall is fit in junction boxes with mainstream dimensions, and features an Ethernet port that supports PoE output. Additionally, its sleek and attractive design ensures easy deployment.

### 02 Product Pictures









### 03 Product Highlights

- Wi-Fi 7 revolution, providing data rates of up to 3600 Mbps
- 2.5 Gbps uplink port for ultra-high-speed indoor access
- PoE output for IP phones and other IoT devices
- Compact design with a thickness of 24 mm
- Anti-theft lock for device protection







#### **Multi-Scenario Adaptability**

The RG-RAP72-Wall is a dual-band wall-plate AP suitable for various applications, including hotels, high-end apartments, educational institutions, and business environments.

#### High-Speed Access and Compatibility

The RG-RAP72-Wall can operate simultaneously in IEEE 802.11be, IEEE 802.11ax, IEEE 802.11ac Wave 2, IEEE 802.11ac Wave 1, and IEEE 802.11n modes. Supporting both 2.4 GHz and 5 GHz frequency bands, it offers a data rate of up to 3.57 Gbps, effectively eliminating any wireless performance bottlenecks.

#### Compact Size, Excellent Heat Dissipation, and Versatile Installation Options

The RG-RAP72-Wall features a compact and lightweight design, with a thickness of just 24 mm (0.94 in.), ensuring excellent heat dissipation performance. The RG-RAP72-Wall is fit in junction boxes with mainstream dimensions, ensuring adaptability to diverse installation environments. In addition to its sleek and attractive appearance, it provides a PoE output port that can power other devices, including IP phones and various smart devices.

#### **Standalone Portal**

The RG-RAP72-Wall supports a standalone portal that enables Wi-Fi authentication through Ruijie Cloud. This standalone portal operates independently of a gateway, making network construction both easier and more cost-effective.

#### **Hardware Specifications**

Model		RG-RAP72-Wall	
Wi-Fi Standards		IEEE 802.11a/b/g/n/ac/ax/be	
Operating Frequency Bands (country-specific restrictions	5 GHz	5.150 GHz to 5.350 GHz, 5.470 GHz to 5.725 GHz, 5.725 GHz to 5.850 GHz	
apply)	2.4 GHz	2.400 GHz to 2.4835 GHz	
Data Bata	5 GHz	2 spatial streams, 2x2 MU-MIMO	
Data Rate	2.4 GHz	2 spatial streams, 2x2 MU-MIMO	
	Built-in/External	Built-in	
Antenna	5 GHz Antenna Gain	4.56 dBi	
	2.4 GHz Antenna Gain	2.84 dBi	
Channel Width	5 GHz	Auto/20/40/80/160 MHz	
Channel Width	2.4 GHz	Auto/20/40 MHz	
	Max. Throughput	3570 Mbps	
Data Rate	5 GHz	2882 Mbps	
	2.4 GHz	688 Mbps	
	Recommended Wi-Fi Coverage Radius (5 GHz)	25 m (82.02 ft.)	
Wi-Fi Coverage	Recommended Wi-Fi Coverage Radius (2.4 GHz)	25 m (82.02 ft.)	
Modulation		OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16- QAM @ 24 Mbps, and 64-QAM @ 48/54 Mbps DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps MIMO-OFDM: BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM, and 4096-QAM OFDMA	

#### Hardware Specifications

Model		RG-RAP72-Wall	
	5 GHz	Total 20 dBm (17 dBm per chain)	
	2.4 GHz	Total 20 dBm (17 dBm per chain)	
Max. Transmit Power	Standard Format	Frequency bands and the maximum Effective Isotropic Radiated Power (EIRP): Note: Country specific restrictions apply. European Union & United Kingdom 2400–2483.5 MHz, EIRP $\leq$ 20 dBm 5150–5350 MHz, EIRP $\leq$ 20 dBm 5470–5725 MHz, EIRP $\leq$ 30 dBm United States: 2400–2483.5 MHz, max. output power $\leq$ 30 dBm & EIRP $\leq$ 36 dBm 5150–5250 MHz, max. output power $\leq$ 30 dBm & EIRP $\leq$ 36 dBm 5250–5350 MHz, max. output power $<$ 24 dBm & EIRP $\leq$ 30 dBm 5470–5725 MHz, max. output power $<$ 24 dBm & EIRP $\leq$ 30 dBm 5725–5850 MHz, max. output power $<$ 24 dBm & EIRP $\leq$ 30 dBm 5725–5850 MHz, max. output power $<$ 30 dBm & EIRP $\leq$ 36 dBm 5725–5850 MHz, max. output power $\leq$ 30 dBm & 5725–5850 MHz, max. output power $\leq$ 30 dBm 5725–5850 MHz, EIRP $\leq$ 23 dBm 5725–5825 MHz, EIRP $\leq$ 20 dBm 5150–5350 MHz, EIRP $\leq$ 20 dBm 5150–5350 MHz, EIRP $\leq$ 30 dBm 5725–5825 MHz, EIRP $\leq$ 30 dBm 5725–5825 MHz, EIRP $\leq$ 30 dBm 5725–5825 MHz, EIRP $\leq$ 23 dBm	
Receiver Sensitivity		11b: -91 dBm (1 Mbps), -88 dBm (5.5 Mbps), -85 dBm (11 Mbps) 11a/g: -89 dBm (6 Mbps), -80 dBm (24 Mbps), -76 dBm (36 Mbps), -71 dBm (54 Mbps) 11n: -83 dBm (MCS0), -65 dBm (MCS7), -83 dBm (MCS8), -65 dBm (MCS0), -65 dBm (MCS7), -83 dBm (MCS8), -65 dBm (MCS0), -57 dBm (MCS9) 11ac: 20 MHz: -83 dBm (MCS0), -57 dBm (MCS9) 11ac: 40 MHz: -79 dBm (MCS0), -57 dBm (MCS9) 11ac: 80 MHz: -76 dBm (MCS0), -51 dBm (MCS9) 11ac: 160 MHz: -76 dBm (MCS0), -50 dBm (MCS9) 11ax: 20 MHz: -85 dBm (MCS0), -54 dBm (MCS11) 11ax: 40 MHz: -82 dBm (MCS0), -52 dBm (MCS11) 11ax: 160 MHz: -76 dBm (MCS0), -52 dBm (MCS11) 11ax: 160 MHz: -76 dBm (MCS0), -52 dBm (MCS11) 11be: 20 MHz: -85 dBm (MCS0), -49 dBm (MCS13) 11be: 40 MHz: -82 dBm (MCS0), -49 dBm (MCS13) 11be: 40 MHz: -82 dBm (MCS0), -44 dBm (MCS13) 11be: 160 MHz: -79 dBm (MCS0), -44 dBm (MCS13)	

#### **Hardware Specifications**

Model		RG-RAP72-Wall	
Power Consumption		< 15 W	
Buttons		1 x Reset button	
LEDs		1 x system LED (white)	
	Number of 10/100/1000/2500BASE-T Ports	1	
Service Ports	Number of 10/100/1000BASE-T Ports	4 (1 port supports PoE Out)	
	PoE Out	Yes	
	DC (Local Power)	No	
Power Supply	IEEE 802.3af	Yes (PoE Out not supported)	
	IEEE 802.3at	Yes	
	Operating Temperature	0°C to +40°C (32°F to +104°F)	
	Storage Temperature	–40°C to +70°C (–40°F to +158°F)	
Environmental	Operating Humidity	5% to 95% RH (non-condensing)	
	Storage Humidity	5% to 95% RH (non-condensing)	
Mounting	Wall-mount	Yes	
	Health	EN IEC 62311:2020	
	Safety	EN IEC 62368-1:2020+A11:2020	
Compliance Standards	EMC	EN 55032: 2015+A11:2020+A1:2020 EN 55035:2017+A11:2020 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021 EN 301 489-1 V2.2.3 EN 301 489-3 V2.1.1 EN 301 489-17 V3.2.4	
Radio		EN 300 328 V2.2.2.2 EN 301 893 V2.1.1 EN 300 440 V2.2.1 Draft EN 303 687 V1.0.0	

#### Hardware Specifications

Model		RG-RAP72-Wall	
	IP Rating	IP41	
Weatherproof	Lightning/Surge Protection	±2 kV	
Dimensions (W x D x H)	Dimensions (excluding mounting bracket)	124 mm x 86 mm x 24 mm (4.88 in. x 3.39 in. x 0.94 in.)	
Weight	Net Weight	≤ 0.27 kg (0.60 lbs.)	
Mean Time Between Failures (I	MTBF)	> 400000 hours	
Certifications		CE, RoHS, FCC, ISED, cTUVus	
Package Dimensions (W x D x H	1)	129 mm x 102 mm x 51mm (5.08 in. x 4.02 in. x 2.01 in.)	
Package Weight		≤ 0.45 kg (0.99 lbs.)	
Flash		256 MB	
Memory		512 MB	

Model		RG-RAP72-Wall	
		AP Mode	Support
	Ethernet	Router Mode	Support
Layer 2 Features	VLAN	Port-based VLAN	Support
	VLAN	802.1Q VLAN	Support
	IPv4	NAT	Support
Layer 3 Features	IPv6	IPv6	Support
	PPPoE	PPPoE Dial-up	Support
Internet Connection Type	DHCP Client		Support
Static IP Add		255	Support

Model		RG-RAP72-Wall	
		SNMP v1	Support
	SNMP	SNMP v2c	Support
		SNMP v3	Support
	Management via e	Web	Support
Management Features	Management via R	uijie Reyee App	Support
	Management via R	uijie Cloud	Support
		Syslog	Support
	Ruijie Cloud Monitoring Log	Client Log	Support
		RF Log	Support
	Self-Organizing Networking		Support
Management	Layer 3 Networking	Layer 3 Networking (Option 43)	Support
Features	AP Mesh		Support
	Upgrade	Upgrade via Ruijie Cloud	Support
		Disconnecting Clients with a Low RSSI	Support
	User Experience Improvement	Transmit Power of Beacon and Probe Response Frames	Support
		RSSI Threshold for Client Association	Support
	WMM	Wi-Fi Multimedia (WMM)	Support
WLAN RF Features	AP Load Balancing	AP Load Balancing	Support
	Client	Manual Client Association	Support
	Association	Intelligent Client Association	Support
	Remote Probe	Remote Probe (Wireless Sniffing)	Support

Model		RG-RAP72-Wall	
	Upgrade	Single-Device Upgrade via eWeb	Support
		One-Click Upgrade via eWeb	Support
		Single-Device Upgrade via Ruijie Reyee App	Support
		One-Click Upgrade via Ruijie Reyee App	Support
		Dual-Bin Backup	Support
Management Features		One-Click Fault Collection	Support
		Backup and Import	Support
	Maintenance and Diagnosis	Factory Reset	Support
		Active Alarm for DHCP Server Conflict	Support
		Packet Sniffing	Support
	Locating AP by the LED		Support
	Network 3.0 Functions	RLDP	Support
		Wireless Flow Control (WQoS)	Support
		Wireless Intelligent Optimization (WIO)	Support
Network-wide		WIO2.0	Support
	Wireless Management	IEEE 802.11k/v Roaming	Support
		Captive Portal	Support
		Client Association	Support
		AP Load Balancing Management	Support

Model		RG-RAP72-Wall	
		Network Password	Support
Network-wide Management	Network Management	Network Scheduled Restart	Support
		Network Restart/Recovery	Support
	DNS	DNS Client	Support
	SSH	SSH	Support
	ТҒТР	TFTP Client	Support
Application Protocol Features	DHCP Server	DHCP Server	Support
	DHCP Client	DHCP Client	Support
	NTP/SNTP	NTP/SNTP Client	Support
	PPPoE	PPPoE Client	Support
Application Protocol Features (IPv6)	DNSv6	DNSv6 Client	Support
		Multiple SSIDs	Support
		Same SSID for Different VLANs	Support
	WLAN Service	Wi-Fi Schedule Management	Support
WLAN Basic Features		Hide SSID	Support
reatures		5G Prior	Support
	Local Forwarding		Support
	802.11ac	802.11ac	Support
	802.11ac	MU-MIMO	Support

Model		RG-RAP72-Wall	
		802.11ax	Support
		Enable/Disable 802.11ax	Support
		1024-QAM	Support
	802.11ax	OFDMA	Support
		DL MU-MIMO	Support
		Spatial Reuse with BSS Coloring	Support
WLAN Basic		4K-QAM	Support
Features	802.11be	Multi-Link Operation (MLO)	Support
		Multiple Resource Unit (MRU)	Support
		1K Block Acknowledgment (BA)	Support
	Roaming	AI Roaming	Support
		Layer 2 Roaming	Support
	Koanning	Layer 3 Roaming	Support
		IEEE 802.11k/v Roaming	Support
		Power Settings	Support
WLAN RF Features	PE Management	Roaming Sensitivity	Support
	RF Management	Radio Switch	Support
		Radio-based Client Limit	Support
	RF Characteristics	RF Beamforming	Support

Model		RG-RAP72-Wall	
Wireless Intelligent Optimization (WIO)		Network Optimization	Support
		Wireless Intelligent Optimization (WIO2.0)	Support
		Scheduled Optimization	Support
		Channel Adjustment	Support
		WIO Client	Support
	WLAN IDs	Layer 2 Client Isolation	Support
WLAN Security		Link Authentication	Support
	WLAN Security	Access Authentication	Support
		Static Blocklist and Allowlist	Support
		SSID-based Blocklist and Allowlist	Support
		PSK Authentication	Support
WLAN Security		WPA (TKIP), WPA2 (AES), and WPA-PSK	Support
		OWE (Enhanced Open) WPA3-SAE WPA2-PSK/WPA3-SAE	Support
		WPA-Enterprise WPA2-Enterprise WPA/WPA2-Enterprise	Support
Standalone Portal	Client	Manually Disconnecting Clients	Support
Standalone Portai	Management	Disconnecting Clients Through Ruijie Cloud	Support
Wireless Flow Control (WQoS)		Client-based Rate Limiting	Support
		Packet-based Rate Limiting	Support
		SSID-based Rate Limiting for Uplink Traffic	Support
		AP-based Rate Limiting	Support

### Software Specifications

Model		RG-RAP72-Wall	
For Global Market	DFS	Dynamic Frequency Selection (DFS)	Support
		WiFiDog (SMS/One-Click/Username & Password Authentication)	Support
	Marketing Authentication	Portal Authentication Escape	Support
		Automatic Portal for iOS, Windows, and Android Operating Systems	Support
Chandalana Dautal	Allowlist	Allowlisting Server Addresses	Support
Standalone Portal		Allowlisting MAC Addresses to Access the Internet without Authentication	Support
		Allowlisting IP Addresses to Access the Internet without Authentication	Support
	Blocklist	Blocklisting MAC Addresses from Accessing the Internet	Support
	Flow Control	Bandwidth Limit	Support
	AAA		Support
802.1X	RADIUS		Support

#### **AP Capacity**

Model		RG-RAP72-Wall	
		Max. Number of SSIDs	8
	WLAN Service	Max. Number of Clients	511
		Recommended Number of Clients	110
	Blocklist and Allowlist	Max. Blocklisted/Allowlisted Clients per AP	256
WLAN		Max. Blocklisted/Allowlisted Clients per SSID	256
Self-Organizing Netwo (SON)		Max. Number of AP Groups	8
	Self-Organizing Network (SON)	No. of APs on a SON	300
		Max. Number of Clients on an AP SON	1500

### 06 Compliance

Model	RG-RAP72-Wall
Regulatory Compliance	EN 55032: 2015+A11:2020+A1:2020 EN 55035:2017+A11:2020 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021 EN 301 489-1 V2.2.3 EN 301 489-3 V2.1.1 EN 301 489-17 V3.2.4 EN 300 328 V2.2.2.2.2 EN 301 893 V2.1.1 EN 300 440 V2.2.1 Draft EN 303 687 V1.0.0
Certifications	CE, RoHS, FCC, ISED, cTUVus

### 07 Ordering Information

Model	Description
RG-RAP72-Wall	BE3600 dual-band wall-mount Wi-Fi 7 access point; High throughput with 4 spatial streams; 1 x 100/1000/2500BASE-T port with auto-negotiation; 4 x 10/100/1000BASE-T ports; Unified networking and management via Ruijie Cloud and Ruijie Reyee App. Maximum power consumption < 15 W; support IEEE 802.3af/at-compliant power supply

### 08 Package Contents

Item	Quantity
RG-RAP72-Wall access point	1
Mounting bracket	1
Phillips pan head screws (M4 x 25 mm)	4
T-key to anti-theft lock	1
User Manual	1
Warranty Card	1

### 09 Warranty

For more information about warranty terms and period, contact your local sales agency.

- Warranty terms: <u>https://www.ruijienetworks.com/support/servicepolicy</u>
- Warranty period: <a href="https://www.ruijienetworks.com/support/servicepolicy/Service-Support-Summany/">https://www.ruijienetworks.com/support/servicepolicy/Service-Support-Summany/</a>

Note: The warranty terms are subject to the terms of different countries and distributors.

### **10** More Information

For more information about Ruijie Networks, visit the official website of Ruijie Networks or contact your local sales agency:

- Ruijie Networks official website: https://www.ruijienetworks.comm/
- Online support: https://www.ruijienetworks.com/support
- Hotline support: <u>https://www.ruijienetworks.com/support/hotline</u>
- Email support: <u>service\_rj@ruijienetworks.com</u>





Ruijie Networks Co., Ltd.

For more information, visit www.ruijienetworks.com or call 86-400-620-8818.