

# RG-RAP72Pro-OD

## BE5040 Wi-Fi 7 Indoor/Outdoor Versatile Access Point

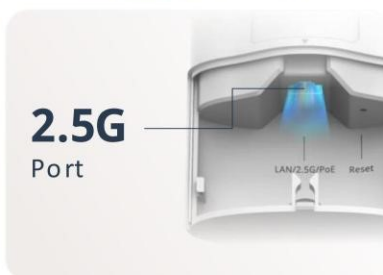
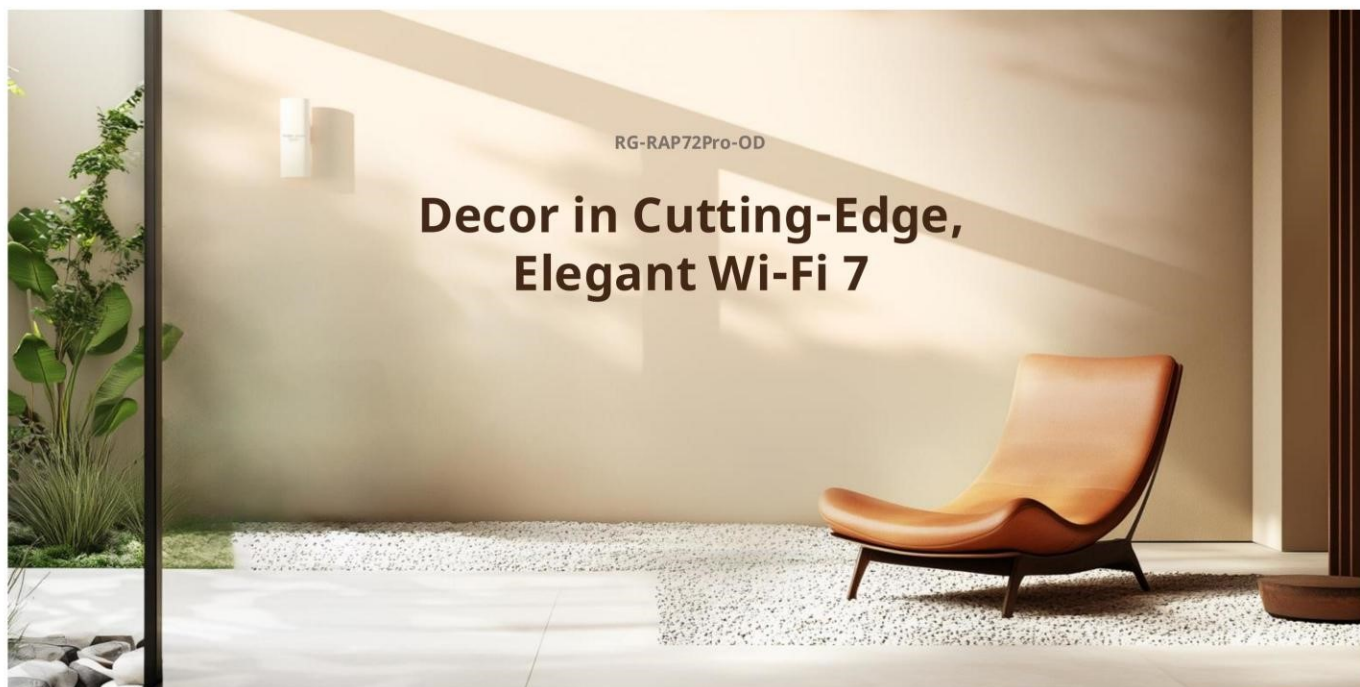


### Highlights

- AI-Powered Wi-Fi 7 Versatile Outdoor/Indoor Mesh AP
- Wall or Pole Mounting to Fit in Any Location
- IP65 Weatherproof Rating, Delivering Consistent Protection and Signal Stability
- Build-in Antennas for Coverage Where Needed
- Tailored for Retail Businesses with Reyee Mesh, Standalone Portal, and AI Roaming

Features

## Highlight Features



## Highlight Features



### Elegant Design with Cutting-Edge Core



## Highlight Features



MLO on, latency lower avg.

**55.19 %**

with the same interference, compared to a single 5 GHz band.

MLO on, avg. loss rate reduced by

**35.71 %**

with the same interference, compared to a single 5 GHz band.

Speed test

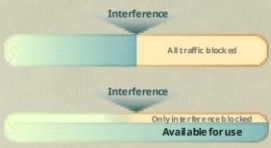
**2.3G**

Maximize transmission performance

**Wi-Fi 7's MLO technology** leverages multiple frequency bands, allowing clients to connect to the optimal band for better performance.



**Preamble Puncturing technology**



**Measured Performance**

**250 %** ↑

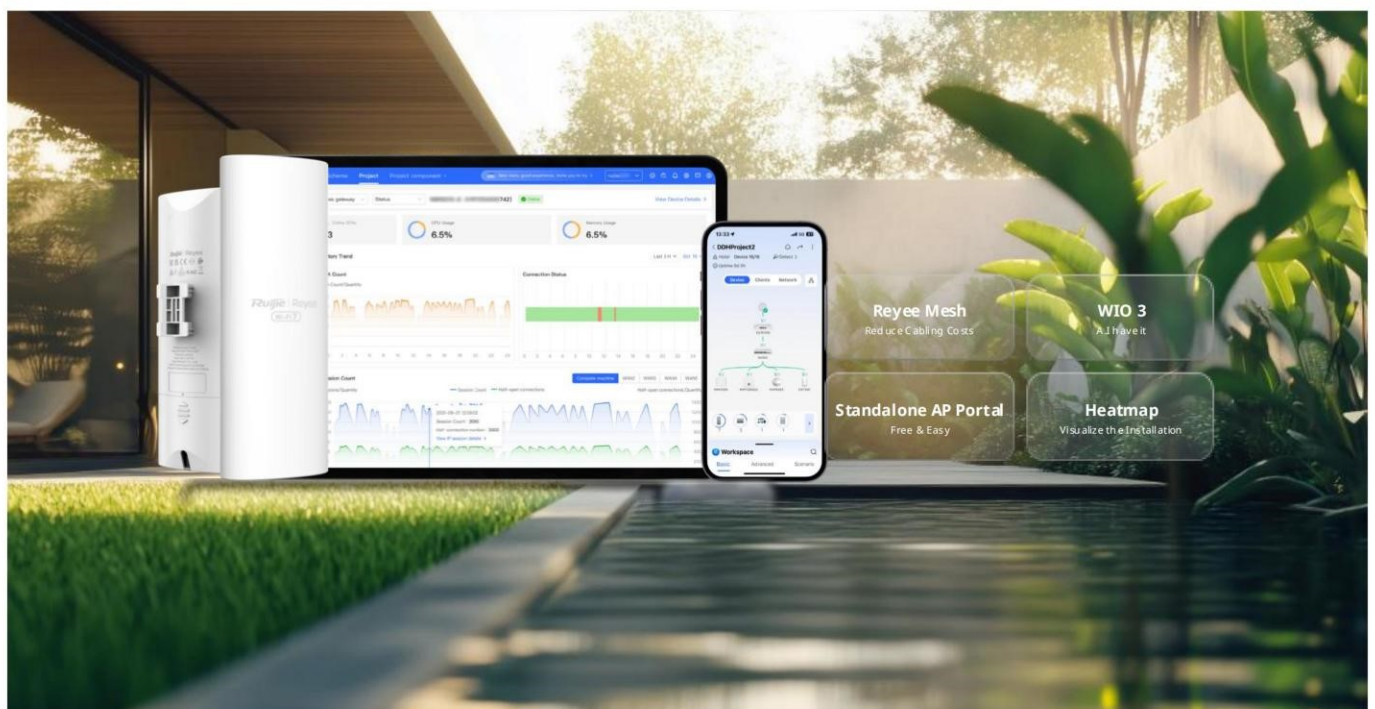
with 983Mbps

without 280Mbps

\*Actual test is under adjacent interference of 40% 20M bandwidth, showing that preamble puncturing technology can achieve up to 250% performance improvement.

**Preamble Puncturing technology** blocks interference-affected channels and enables cross-frequency bonding of uninterrupted channels, improving overall channel utilization by up to 7 times.

## Highlight Features



## / Product Information

| Model        | RG-RAP72Pro-OD |
|--------------|----------------|
| Product Type | Outdoor        |

## / Hardware Specifications

| Model                      | RG-RAP72Pro-OD                                                                                                                                                                                                                                                                                                            |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wi-Fi Radio                |                                                                                                                                                                                                                                                                                                                           |
| 6 GHz Wi-Fi                | No                                                                                                                                                                                                                                                                                                                        |
| 5 GHz Wi-Fi                | Wi-Fi 4 (IEEE 802.11a/n)<br>Wi-Fi 5 (IEEE 802.11ac)<br>Wi-Fi 6 (IEEE 802.11ax)<br>Wi-Fi 7 (IEEE 802.11be)                                                                                                                                                                                                                 |
| 2.4 GHz Wi-Fi              | Wi-Fi 4 (IEEE 802.11b/g/n)<br>Wi-Fi 6 (IEEE 802.11ax)<br>Wi-Fi 7 (IEEE 802.11be)                                                                                                                                                                                                                                          |
| Operating band             | IEEE 802.11b/g/n/ax/be, 2.400 GHz to 2.4835 GHz<br>IEEE 802.11a/n/ac/ax/be, 5.150 GHz to 5.350 GHz, 5.470 GHz to 5.725 GHz, 5.725 GHz to 5.850 GHz<br><br>Note: Available bands vary with countries and regions. To use the preceding frequency bands, ensure that your country or region supports these frequency bands. |
| Radio design               | Dual-radio<br>5 spatial streams<br>• 2.4 GHz: 2 x 2, MU-MIMO<br>• 5 GHz: 3 x 3, MU-MIMO                                                                                                                                                                                                                                   |
| FEM                        | 2.4 GHz: 2 x eFEM<br>5 GHz: 3 x eFEM                                                                                                                                                                                                                                                                                      |
| 6 GHz channel width        | No                                                                                                                                                                                                                                                                                                                        |
| 5 GHz channel width        | Auto/20/40/80/160 MHz                                                                                                                                                                                                                                                                                                     |
| 2.4 GHz channel width      | Auto/20/40 MHz                                                                                                                                                                                                                                                                                                            |
| Maximum wireless data rate | 5011 Mbps                                                                                                                                                                                                                                                                                                                 |
| 6 GHz wireless data rate   | No                                                                                                                                                                                                                                                                                                                        |
| 5 GHz wireless data rate   | 4323 Mbps                                                                                                                                                                                                                                                                                                                 |

## / Hardware Specifications

| Model                            | RG-RAP72Pro-OD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.4 GHz wireless data rate       | 688 Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum transmit power           | <p>Frequency bands and maximum Effective Isotropic Radiated Power (EIRP):</p> <p>Note: Country specific restrictions apply.</p> <p>European Union &amp; United Kingdom<br/> 2400–2483.5 MHz, EIRP ≤ 20 dBm<br/> 5470–5725 MHz, EIRP ≤ 30 dBm</p> <p>United States:<br/> 2400–2483.5 MHz, max. output power ≤ 30 dBm &amp; EIRP ≤ 36 dBm<br/> 5150–5250 MHz, max. output power ≤ 30 dBm &amp; EIRP ≤ 36 dBm<br/> 5250–5350 MHz, max. output power &lt; 24 dBm &amp; EIRP ≤ 30 dBm<br/> 5470–5725 MHz, max. output power &lt; 24 dBm &amp; EIRP ≤ 30 dBm<br/> 5725–5850 MHz, max. output power ≤ 30 dBm &amp; EIRP ≤ 36 dBm</p> <p>Myanmar:<br/> 2400–2483.5 MHz, EIRP ≤ 23 dBm<br/> 5725–5825 MHz, EIRP ≤ 30 dBm</p> <p>Thailand:<br/> 2400–2483.5 MHz, EIRP ≤ 20 dBm<br/> 5470–5725 MHz, EIRP ≤ 30 dBm<br/> 5725–5825 MHz, EIRP ≤ 30 dBm</p> <p>Indonesia:<br/> 2400–2483.5 MHz, EIRP ≤ 36 dBm<br/> 5725–5825 MHz, EIRP ≤ 36 dBm</p> <p>Egypt:<br/> 2400–2483.5 MHz, EIRP ≤ 20 dBm<br/> 5150–5350 MHz, EIRP ≤ 23 dBm</p> |
| Maximum transmit power (6 GHz)   | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum transmit power (5 GHz)   | <p>Combined power: 27.7 dBm (single-stream power: 23 dBm)</p> <p>Note: The transmit power varies according to regulations in different countries and regions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum transmit power (2.4 GHz) | <p>Combined power: 26 dBm (single-stream power: 23 dBm)</p> <p>Note: The transmit power varies according to regulations in different countries and regions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Coverage range                   | <p>5 GHz max: 300 m (984.25 ft.)<br/> 2.4 GHz max: 100 m (328.08 ft.)<br/> 5 GHz recommended: 150 m (492.13 ft.)<br/> 2.4 GHz recommended: 50 m (164.04 ft.)</p> <p>Note: The data is obtained in an ideal environment without obstruction. The signal coverage radius depends on client performance and environmental interference.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## / Hardware Specifications

| Model                          | RG-RAP72Pro-OD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Modulation                     | <p>OFDM: BPSK @ 6/9 Mbps, QPSK @ 12/18 Mbps, 16-QAM @ 24 Mbps, and 64-QAM @ 48/54 Mbps</p> <p>DSSS: DBPSK @ 1 Mbps, DQPSK @ 2 Mbps, and CCK @ 5.5/11 Mbps</p> <p>MIMO-OFDM: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, and 4096-QAM</p> <p>OFDMA</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Receive sensitivity            | <p>11b: -91 dBm (1 Mbps), -88 dBm (5.5 Mbps), -85 dBm (11 Mbps)</p> <p>11a/g: -89 dBm (6 Mbps), -80 dBm (24 Mbps), -76 dBm (36 Mbps), -71 dBm (54 Mbps)</p> <p>11n: -83 dBm (MCS0), -65 dBm (MCS7), -83 dBm (MCS8), -65 dBm (MCS15)</p> <p>11ac: 20 MHz: -83 dBm (MCS0), -57 dBm (MCS9)</p> <p>11ac: 40 MHz: -79 dBm (MCS0), -57 dBm (MCS9)</p> <p>11ac: 80 MHz: -76 dBm (MCS0), -51 dBm (MCS9)</p> <p>11ac: 160 MHz: -76 dBm (MCS0), -50 dBm (MCS9)</p> <p>11ax: 20 MHz: -85 dBm (MCS0), -58 dBm (MCS11)</p> <p>11ax: 40 MHz: -82 dBm (MCS0), -54 dBm (MCS11)</p> <p>11ax: 80 MHz: -79 dBm (MCS0), -52 dBm (MCS11)</p> <p>11ax: 160 MHz: -76 dBm (MCS0), -49 dBm (MCS11)</p> <p>11be: 20 MHz: -85 dBm (MCS0), -52 dBm (MCS13)</p> <p>11be: 40 MHz: -82 dBm (MCS0), -49 dBm (MCS13)</p> <p>11be: 80 MHz: -82 dBm (MCS0), -46 dBm (MCS13)</p> <p>11be: 160 MHz: -79 dBm (MCS0), -44 dBm (MCS13)</p> |
| Antenna                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Antenna                        | <p>5 GHz: 1 built-in omnidirectional antenna</p> <p>Integrated 2.4 GHz and 5 GHz: 2 built-in omnidirectional antennas</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Antenna horizontal orientation | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Antenna vertical orientation   | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Antenna gain (6 GHz)           | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Antenna gain (5 GHz)           | 6.28 dBi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Antenna gain (2.4 GHz)         | 3.62 dBi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Dimensions and Weight          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product dimensions (W x D x H) | 90 mm x 46 mm x 239 mm (3.54 in. x 1.81 in. x 9.41 in.)<br>(excluding the mounting bracket)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## / Hardware Specifications

| Model                                  | RG-RAP72Pro-OD                                                                                                                                                                                                                     |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Color                                  | White                                                                                                                                                                                                                              |
| Weight                                 | ≤ 0.7 kg (1.54 lbs.) (without packaging materials)                                                                                                                                                                                 |
| Shipping weight                        | ≤ 1 kg (2.20 lbs)                                                                                                                                                                                                                  |
| Port Specifications                    |                                                                                                                                                                                                                                    |
| Number of 10/100/1000/2500BASE-T ports | 1                                                                                                                                                                                                                                  |
| Reset button                           | 1                                                                                                                                                                                                                                  |
| LEDs                                   | 1 x system status LED                                                                                                                                                                                                              |
| Power Supply and Consumption           |                                                                                                                                                                                                                                    |
| Power supply                           | PoE/PoE+                                                                                                                                                                                                                           |
| Local power supply                     | No                                                                                                                                                                                                                                 |
| Dimensions of the DC connector         | No                                                                                                                                                                                                                                 |
| PoE In standard                        | <ul style="list-style-type: none"><li>• IEEE 802.3af (PoE)</li></ul> Note: Radio transmission and reception is limited to 1T1R at 2.4 GHz and 2T2R at 5 GHz. <ul style="list-style-type: none"><li>• IEEE 802.3at (PoE+)</li></ul> |
| PoE budget                             | No                                                                                                                                                                                                                                 |
| Maximum power consumption              | 21 W                                                                                                                                                                                                                               |
| Environment and Reliability            |                                                                                                                                                                                                                                    |
| Operating temperature                  | −30°C to +65°C (−22°F to +149°F)                                                                                                                                                                                                   |
| Storage temperature                    | −40°C to +85°C (−40°F to +185°F)                                                                                                                                                                                                   |
| Operating humidity                     | 0% RH to 100% RH (non-condensing)                                                                                                                                                                                                  |
| Storage humidity                       | 0% RH to 100% RH (non-condensing)                                                                                                                                                                                                  |
| Mounting options                       | Wall/Pole                                                                                                                                                                                                                          |
| IP rating                              | IP65                                                                                                                                                                                                                               |
| Surge protection                       | Ethernet port: ±4 kV for common mode                                                                                                                                                                                               |

# / Hardware Specifications

| Model                                   | RG-RAP72Pro-OD                                                                                         |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------|
| MTBF                                    | 400,000 hours                                                                                          |
| Certification and Regulatory Compliance |                                                                                                        |
| RoHS                                    | Yes                                                                                                    |
| Safety compliance                       | EN 62368-1                                                                                             |
| EMC                                     | EN 55032<br>EN 55035<br>EN IEC 61000-3-2<br>EN 61000-3-3<br>EN 301489-1<br>EN 301489-3<br>EN 301489-17 |
| RF                                      | EN 300 328<br>EN 301 893<br>EN 300 440<br>Draft EN 303 687                                             |
| Certification                           | CE, FCC, ISED, cTUVus                                                                                  |
| System Specifications                   |                                                                                                        |
| Flash memory                            | 256 MB                                                                                                 |
| RAM                                     | 512 MB DDR3                                                                                            |

## Software Specifications

| Model                                             | RG-RAP72Pro-OD                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic Configurations                              |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| AP mode                                           | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Routing mode                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Internet access mode                              | Static IP address<br>Static IPv6 address<br>Dynamic IP address<br>Dynamic IPv6 address<br>PPPoE                                                                                                                                                                                                                                                                                                                               |
| Interface                                         |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IPTV transparent transmission                     | No                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Ethernet Interface                                |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PPPoE clients                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Ethernet Switching                                |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IEEE 802.1Q VLAN                                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |
| WLAN                                              |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Maximum number of associated wireless clients     | 64 (2.4 GHz)<br>511 (5 GHz)<br>511 (2.4 GHz and 5 GHz enabled)                                                                                                                                                                                                                                                                                                                                                                |
| Recommended number of associated wireless clients | <ul style="list-style-type: none"><li>● Support for IEEE 802.11ax and 160 MHz:<br/>16 (2.4 GHz)<br/>94 (5 GHz)<br/>110 (2.4 GHz and 5 GHz enabled)</li><li>● Support for IEEE 802.11ax and 80 MHz:<br/>16 (2.4 GHz)<br/>64 (5 GHz)<br/>80 (2.4 GHz and 5 GHz enabled)<ul style="list-style-type: none"><li>● Support for IEEE 802.11ac:<br/>8 (2.4 GHz)<br/>32 (5 GHz)<br/>40 (2.4 GHz and 5 GHz enabled)</li></ul></li></ul> |
| Maximum number of SSIDs                           | 8                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Radio-based client limiting                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Layer 2 isolation                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Software Specifications

| Model                                                                    | RG-RAP72Pro-OD |
|--------------------------------------------------------------------------|----------------|
| OFDMA                                                                    | Yes            |
| WMM                                                                      | Yes            |
| DFS                                                                      | Yes            |
| MLO                                                                      | Yes            |
| 4K-QAM                                                                   | Yes            |
| Different SSIDs for the same VLAN                                        | Yes            |
| Enabling/Disabling MLO                                                   | Yes            |
| AP load balancing                                                        | Yes            |
| Beamforming                                                              | Yes            |
| 802.11k/v roaming                                                        | Yes            |
| Fast transition (802.11r)                                                | Yes            |
| Layer 2 roaming                                                          | Yes            |
| Layer 3 roaming                                                          | Yes            |
| AI roaming                                                               | Yes            |
| PSK authentication                                                       | Yes            |
| Static allowlist                                                         | Yes            |
| Adjusting the transmit power for beacon and probe frames                 | Yes            |
| Encryption mode (WPA-PSK, WPA2-PSK, WPA/WPA2-PSK)                        | Yes            |
| OWE (Enhanced Open)<br>WPA3-SAE<br>WPA2-PSK/WPA3-SAE                     | Yes            |
| Number of blocklists and allowlists based on MAC addresses (single SSID) | 256            |
| Number of global blocklists/allowlists                                   | 256            |

# Software Specifications

| Model                                         | RG-RAP72Pro-OD                                                                                                   |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Mesh management                               | Yes                                                                                                              |
| AP Mesh                                       | Yes                                                                                                              |
| AP portal authentication                      | Yes                                                                                                              |
| Maximum number of devices that can be managed | 300                                                                                                              |
| One-Click Network Optimization                | Yes                                                                                                              |
| Static blocklist                              | Yes                                                                                                              |
| IP Service                                    |                                                                                                                  |
| ARP binding                                   | Yes                                                                                                              |
| IPv4 ping                                     | Yes                                                                                                              |
| IPv6 ping                                     | Yes                                                                                                              |
| Traceroute                                    | Yes                                                                                                              |
| Static/Dynamic NAT                            | Yes                                                                                                              |
| DHCP server                                   | Yes                                                                                                              |
| Authentication                                |                                                                                                                  |
| 802.1X authentication                         | Yes                                                                                                              |
| Network Management and Monitoring             |                                                                                                                  |
| Wireless repeater mode                        | Yes                                                                                                              |
| Web login information                         | Single-device login address: 10.44.77.254<br>Network-wide login address: 10.44.77.253<br>Default password: admin |
| Network-wide configuration and management     | Yes                                                                                                              |
| Ruijie Reyee App management                   | Yes                                                                                                              |
| eWeb management                               | Yes                                                                                                              |
| Ruijie Cloud management                       | Yes                                                                                                              |
| SNMP                                          | Yes                                                                                                              |

## Software Specifications

| Model                                                               | RG-RAP72Pro-OD |
|---------------------------------------------------------------------|----------------|
| Configuration synchronization among the app, eWeb, and Ruijie Cloud | Yes            |
| Displaying device information on Ruijie Cloud                       | Yes            |

# Package Contents

|               |                |
|---------------|----------------|
| Model         | RG-RAP72Pro-OD |
| Accessories   |                |
| Power adapter | No             |

**Ruijie** | ReYee

 **R**edefine **y**our **e**asy network



**Ruijie Networks Co., Ltd.**

Official Website: <https://Reyee.Ruijie.com>