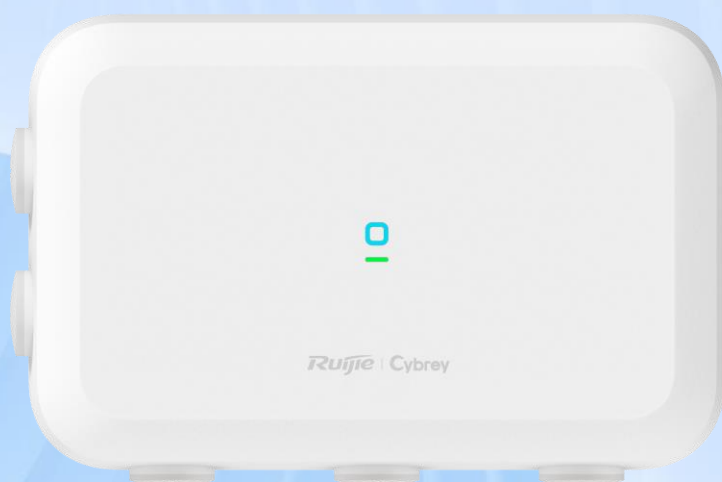




# RG-CAP62-O

## **Product Overview**

The RG-CAP62-O is a dual-radio 802.11ax-compliant settled wireless access point (AP) provided by Ruijie Networks for K12, government, hotel, resort, park outdoor scenarios. The RG-CAP62-O adds the optical port. It complies with 802.11ax, 802.11ac Wave 2, 802.11ac Wave 1, and 802.11n. With a hardware-independent dual-radio design, the RG-CAP62-O can provide a data rate of up to 2.976 Gbps.

The design of the RG-CAP62-O consider factors such as wireless network security, radio control, access control, QoS, seamless roaming. With network controller (CNC) and Ruijie Cybrey Cloud, the RG-CAP62-O can implement wireless user experience, security features, access control, and IoT application extension.

The RG-CAP62-O adopts IP68 rated housing. It is applicable to harsh outdoor environments. In addition, it supports the local power supply and Power over Ethernet (PoE), which can be flexibly selected based on the onsite environment.

## **Product Highlights**

### **High-speed Access and Compatibility**

The RG-CAP62-O supports various wireless protocols, such as 802.11ax, 802.11ac Wave2, 802.11ac Wave1, and 802.11n. It features a hardware-independent dual-band design to deliver a data rate of up to 2.976 Gbps. Additionally, it is compatible with an extensive array of devices, promoting seamless interconnectivity among employees and customers.

### **Security and Scalability**

The RG-CAP62-O stands out with its exceptional wireless network security, RF control, access control, QoS, and seamless roaming. With Ruijie Cybrey's network controller (CNC), it enables wireless user data forwarding, security, and access control to cope with diverse service needs.

### **Multi-scenario Adaptability**

The RG-CAP62-O, a dual-band outdoor wireless access point, is ideal for a wide range of applications, including K12, government, hotel, resort, park outdoor scenarios, providing flexible solutions to meet diverse service needs.

### **Flexible Deployment and Power Supply**

The RG-CAP62-O features two SMA interfaces, which can be used to connect external antennas. Users can choose between using the built-in antenna or the external antenna in eWeb.

The RG-CAP62-O supports both local power supply (DC & 2 pin terminal) and Power over Ethernet (PoE), providing you with the flexibility to choose the power supply mode. In addition, the RG-CAP62-O can be mounted against a wall or pole, making space deployment and environmental requirements less challenging.

## Product Specifications

### Hardware Specifications

#### Dimensions and Weight

| Dimensions and Weight           |                 |
|---------------------------------|-----------------|
| Unit dimensions (W x D x H)     | ---             |
| Shipping dimensions (W x D x H) | ---             |
| Unit weight                     | ---             |
| Shipping weight                 | ---             |
| Mounting                        | Wall/Pole-mount |
| Color                           | White           |
| Lock option                     | Kensington lock |

#### Wi-Fi Radio

| Wi-Fi Radio    |                                                                                                                                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio design   | Dual-radio and four spatial streams: <ul style="list-style-type: none"><li>• Radio 1: 2.4 GHz, two spatial streams, 2x2 MU-MIMO</li><li>• Radio 2: 5 GHz, two spatial streams, 2x2 MU-MIMO</li></ul> |
| Operating band | Radio 1, 802.11b/g/n/ax<br>Radio 2, 802.11a/n/ac/ax                                                                                                                                                  |
| Data rates     | Maximum combined peak data rate: 2.976 Gbps<br>Radio 1: 2.4 GHz, 0.574 Gbps<br>Radio 2: 5 GHz, 2.402 Gbps                                                                                            |
| Packet         | 802.11n/ac/ax : A-MPDU and A-MSDU                                                                                                                                                                    |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aggregation            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Antenna type           | <p>Built-in omnidirectional antennas (two 2.4 GHz antennas and two 5 GHz antennas)</p> <p>Two (female) RP-SMA connectors for external antennas (antennas ordered separately)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Antenna gain           | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum transmit power | <p>Frequency bands and maximum Effective Isotropic Radiated Power (EIRP):Note:<br/>Country specific restrictions apply.</p> <p>European Union &amp; United Kingdom</p> <p>2400–2483.5 MHz, EIRP ≤ 20 dBm</p> <p>5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>5470–5725 MHz, EIRP ≤ 30 dBm</p> <p>Myanmar</p> <p>2400–2483.5 MHz, EIRP ≤ 23 dBm</p> <p>5725–5825 MHz, EIRP ≤ 30 dBm</p> <p>Thailand</p> <p>2400–2483.5 MHz, EIRP ≤ 20 dBm</p> <p>5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>5470–5725 MHz, EIRP ≤ 30 dBm</p> <p>5725–5825 MHz, EIRP ≤ 30 dBm</p> <p>Indonesia</p> <p>2400–2483.5 MHz, EIRP ≤ 27 dBm</p> <p>5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>5725–5825 MHz, EIRP ≤ 23 dBm</p> <p>Egypt</p> <p>2400–2483.5 MHz, EIRP ≤ 20 dBm</p> <p>5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>Vietnam</p> <p>2400–2483.5 MHz, EIRP ≤ 23 dBm</p> <p>5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>5470–5725 MHz, EIRP ≤ 30 dBm</p> |

|                  |                                                                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | 5725–5850 MHz, EIRP ≤ 30 dBm                                                                                                                                                                       |
| Power increment  | Configurable in increments of 1 dBm                                                                                                                                                                |
| Modulation types | 802.11b: BPSK, QPSK, CCK<br>802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM<br>802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM<br>802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM |

#### Port Specifications

| Port Specifications |                                                                                                                |
|---------------------|----------------------------------------------------------------------------------------------------------------|
| Fixed service port  | 1 x 100/1000/2.5GBASE-T port<br>1 x 2.5G SFP port, compatibility with 1GE modules, supporting auto-negotiation |

|                       |                                       |
|-----------------------|---------------------------------------|
| Fixed management port | 1 x RJ45 console port                 |
| Bluetooth             | Bluetooth 5.x                         |
| Status LED            | 1 x system status LED<br>1 x RSSI LED |
| Button                | 1 x Reset button                      |

### Power Supply and Consumption

| Power Supply and Consumption |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input power supply           | <p>The AP supports the following three power supply modes:</p> <ul style="list-style-type: none"> <li>54 V DC/0.6 A power input over DC jack: The DC jack accepts 2.1 mm/5.5 mm center-positive circular plug. A DC power adapter needs to be purchased separately.</li> <li>PoE input over WAN and 2-pin terminal: The power source equipment (PSE) complies with IEEE 802.3af/at standard (PoE/PoE+).</li> </ul> <p>Note:</p> <ul style="list-style-type: none"> <li>If both DC power and PoE are available, DC power is preferred.</li> </ul> |
| Overall power consumption    | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

### Environment and Reliability

| Environment and Reliability |                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature                 | <p>Operating temperature: -40°C to +65°C (-40°F to +149°F)</p> <p>Storage temperature: -40°C to +85°C (-40°F to +185°F)</p> <p>Note: At an altitude in the range of 3,000–5,000 m (9,842.52–16,404.20 ft.), every time the altitude increases by 220 m (722 ft.), the maximum temperature decreases by 1°C (1.8°F).</p> |
| Humidity                    | <p>Operating humidity: 0% RH to 100% RH (non-condensing)</p> <p>Storage humidity: 0% RH to 100% RH (non-condensing)</p>                                                                                                                                                                                                 |

|                                  |                                                                      |
|----------------------------------|----------------------------------------------------------------------|
| IP rating                        | IP68                                                                 |
| Mean Time Between Failure (MTBF) | 200,000 hours (22 years) at the operating temperature of 25°C (77°F) |

### Certifications and Regulatory Compliance

| Certifications and Regulatory Compliance |                                                                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Security regulations                     | IEC 62368-1<br>EN 62368-1<br>EN 60950-22                                                                  |
| EMC regulations                          | EN 55032<br>EN 55035<br>EN IEC 61000-3-2<br>EN 61000-3-3<br>EN 301 489-1<br>EN 301 489-3<br>EN 301 489-17 |
| Radio frequency regulations              | EN 300328<br>EN 301 893<br>EN 300 440<br>EN 62311<br>EN IEC 62311<br>EN 50665<br>FCC Part 15              |

### Software Specifications

#### WLAN

| WLAN                                                |      |
|-----------------------------------------------------|------|
| Maximum number of associated STAs                   | 1024 |
| Recommended maximum number of active devices per AP | 64   |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum number of BSSIDs           | 32 (up to 16 BSSIDs per radio)                                                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum number of WLAN IDs         | 16                                                                                                                                                                                                                                                                                                                                                                                                                             |
| STA management                     | SSID hiding<br>Each SSID can be configured with the authentication mode, encryption mechanism, and VLAN attributes independently.<br>Remote intelligent perception technology (RIPT)<br>Intelligent client identification technology<br>Intelligent load balancing based on the STA quantity or traffic<br>Intelligent STA identification technology<br>Rate set settings                                                      |
| STA limiting                       | SSID-based STA limiting<br>Radio-based STA limiting                                                                                                                                                                                                                                                                                                                                                                            |
| Bandwidth limiting                 | STA/SSID/AP-based rate limiting                                                                                                                                                                                                                                                                                                                                                                                                |
| CAPWAP                             | IPv4/IPv6 CAPWAP<br>Layer 2 and Layer 3 topology between an AP and an CNC<br>An AP can automatically discover the accessible CNC.<br>An AP can be automatically upgraded through the CNC.<br>An AP can automatically download the configuration file from the CNC.<br>CAPWAP through NAT<br>MTU setting and fragmentation over CAPWAP tunnels<br>Encryption over CAPWAP data tunnels<br>Encryption over CAPWAP control tunnels |
| Data forwarding                    | Centralized and local forwarding                                                                                                                                                                                                                                                                                                                                                                                               |
| Wireless roaming                   | Layer 2 and Layer 3 roaming                                                                                                                                                                                                                                                                                                                                                                                                    |
| Application management             | Application identification                                                                                                                                                                                                                                                                                                                                                                                                     |
| Bridge Vlan                        | Supported                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Wireless Distribution System (WDS) | Supported                                                                                                                                                                                                                                                                                                                                                                                                                      |

### Security and Authentication

|          |  |
|----------|--|
| Security |  |
|----------|--|

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>and<br/>Authenticat<br/>tion</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Authenticat<br>ion and<br>encryption | Remote Authentication Dial-In User Service (RADIUS)<br>EXEC authorization, specifying source IP addresses of RADIUS packets, supporting authentication of other vendors, and built-in authentication server<br>PPSK, UPSK (used with CNC) , web, 802.1X, WPA, WPA2, and WPA3 authentication<br>SMS authentication (used with CNC)<br>MAB authentication (used with CNC)<br>WEP (64/128 bits), WPA-Personal, WPA-Enterprise, WPA2/WPA3(AES), WPA2-Personal, WPA2-Enterprise, WPA3-Personal (WPA2/WPA3 transition mode), WPA3-Enterprise (CCMP), WPA3-OWE, WPA3-OWE transition mode |
| Data frame<br>filtering              | Allowlist, static blocklist, and dynamic blocklist                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| WIDS                                 | Wireless Intrusion Detection System (WIDS)<br>User isolation<br>Rogue AP detection and containment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Dynamic<br>Policy                    | IP standard ACL, MAC extended ACL, IP extended ACL, expert-level ACL, and IPv6 ACL<br>Time range-based ACL<br>ACL based on a Layer 2 interface<br>ACL based on a Layer 3 interface<br>Ingress ACL based on a wireless interface<br>Dynamic ACL assignment based on 802.1X authentication (used with an CNC)                                                                                                                                                                                                                                                                       |
| CPP                                  | Supported                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| NFPP                                 | Supported                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Routing and Switching

|                                  |                                                                                                                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Routing and<br/>Switching</b> |                                                                                                                                                                                                      |
| MAC                              | Static MAC address, MAC address filtering, MAC address limiting<br>MAC address table size: 1,024<br>Maximum number of static MAC addresses: 1,024<br>Maximum number of filtered MAC addresses: 1,024 |

|               |                                                                                                                                                                                  |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ARP           | ARP entry aging, gratuitous ARP learning, and proxy ARP<br>Identification of IP address conflict among downlink users<br>Maximum number of ARP entries: 1,024<br>ARP check       |
| IPv4 services | Static IPv4 address and DHCP-assigned IPv4 address<br>Maximum number of IPv4 addresses configured on each Layer 3 interface: 200<br>NAT, FTP ALG, and DNS ALG                    |
| IPv6 services | IPv6 addressing, Neighbor Discovery (ND), IPv6 ND proxy, ICMPv6, and IPv6 ping<br>IPv6 DHCP client<br>Maximum number of IPv6 addresses configured on each Layer 3 interface: 400 |
| IP routing    | IPv4/IPv6 static routing<br>Maximum number of static IPv4 routes: 1,024<br>Maximum number of static IPv6 routes: 1,000                                                           |
| Multicast     | Multicast-to-unicast conversion                                                                                                                                                  |
| VPN           | PPPoE client<br>IPsec VPN                                                                                                                                                        |
| LLDP          | LLDP<br>LLDP-MED<br>LLDP-PoE                                                                                                                                                     |

### Management and Monitoring

| Management and Monitoring   |                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Network management          | Fault inspection and alarm<br>Information statistics and logging<br>SNMPv1/v2c/v3<br>NTP Server and NTP Client<br>SNTP client |
| Network management platform | Ruijie Cybrey Cloud<br>Web-based management (Eweb)                                                                            |

|                               |                                                                                                                                                                                                                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| User access management        | Console, Telnet, SSH, SNMP, and TFTP-based management                                                                                                                                                                                                                                |
| Fat/Fit/Cloud mode switchover | <p>When the AP works in Fit mode, it can be switched to Fat mode through an CNC.</p> <p>When the AP works in Fat mode, it can be switched to Fit mode through the console port or Telnet.</p> <p>When the AP works in Cloud mode, it can be managed through Ruijie Cybrey Cloud.</p> |

### Order Information

Take the following ordering procedure:

Order an RG-CAP62-O.

The RG-CAP62-O supports two SMA interfaces, which can be used to connect external antennas. Purchase an antenna if you need it.

### Main Unit

| Model      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RG-CAP62-O | <p>Wi-Fi 6 dual-radio outdoor access point. Up to 4 spatial streams, peak data rate of 2.976 Gbps.</p> <p>The AP consumes one license of an CNC.</p> <p>In compliance with IEEE 802.11a/b/g/n/ac/ax standards.</p> <p>Fat/Fit/Cloud mode switching.</p> <p>IEEE 802.3af/at-compliant (PoE/PoE+) and DC power supply.</p> <p>Note:</p> <p>The power source equipment (PSE) needs to be purchased separately.</p> <p>The DC power supply needs to be purchased separately, and the output voltage/current must be 54 V/0.6 A.</p> |

### Antennas

| Model       | Description                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RG-ANT30-D2 | Equipped with a high-performance dual-band directional outdoor antenna, it is specifically designed for scenarios requiring directional coverage in either the 2.4 GHz or 5 GHz frequency bands. Its 5 GHz horizontal and vertical beamwidths are both 20°, with a peak gain of 14 dBi. For the 2.4 GHz band, the horizontal and vertical beamwidths are 40°, and the peak gain reaches 12 dBi. |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RG-ANT90-T2 | <p>The tri-band, dual-polarized high-gain antenna features a 65° horizontal beamwidth and a 18° vertical beamwidth at 6GHz, achieving a peak gain of 11dBi. At 5GHz, it also boasts a 65° horizontal beamwidth and a 18° vertical beamwidth, with a peak gain of 11dBi. For the 2.4GHz band, the antenna exhibits a 60° horizontal beamwidth and a 20° vertical beamwidth, delivering a peak gain of 9dBi.</p> |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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