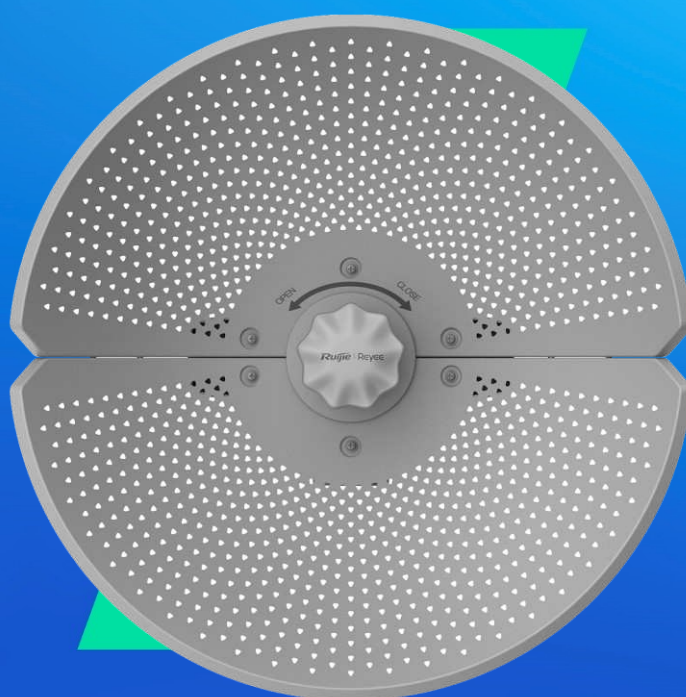


RG-AirMetro460G

CPE of RG-AirMetro Series Wireless Bridges



Highlights

- PTP Max. 15 km Working Distance
- PTMP Easy Pairing All in 30 sec
- 24 V Passive PoE
- IP65, 6 kV Surge Protection and ± 24 kV ESD against Harsh Environment
- 220.32 km/h (137 mph) Wind Survivability
- All-in-one Cloud Management Simplifies the User Journey

Highlight Features



RG-AirMetro Series Wireless Bridges

After pairing, the bridges support:

15 km

Up to 15 km
Wireless Transmission

32 PTMP

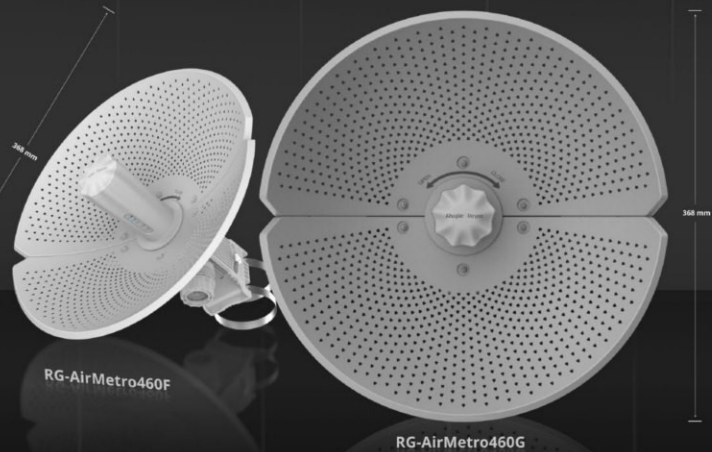
Up to 32 PTMP
Links



Easy Site Survey
Tool



All-in-One Cloud
Management



Highlight Features

CPE

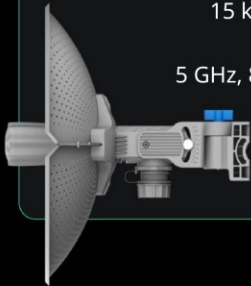
Mix freely for Various Scenarios

RG-AirMetro460G

1 x 10/100/1000 Mbps Port

15 km, 23 dBi

5 GHz, 867 Mbps

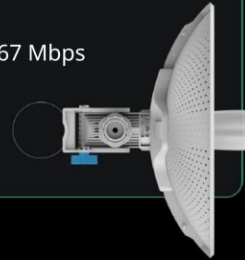


RG-AirMetro460F

1x 10/100 Mbps Port

15 km, 23 dBi

5 GHz, 867 Mbps



Signal Enhancement

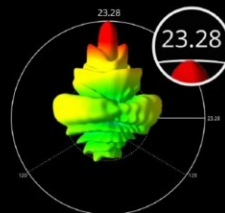
The Secret of Circular Grace

Compared with Square Antenna:

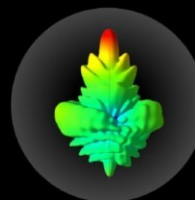
The **total gain** of the circular is **increased**;

The gain in both horizontal and vertical directions is more **balanced**;

Therefore, **under the same coverage area, the signal of the circular antenna is stronger.**



Horizontal: 23.28 dBi



Vertical: 23.19 dBi

Note: All data here are theoretical values obtained by Ruijie Reeye internal laboratories through tests carried out under particular conditions. Actual data may vary owing to differences in individual products, software versions, application conditions, and environmental factors. All data is subject to actual usage.

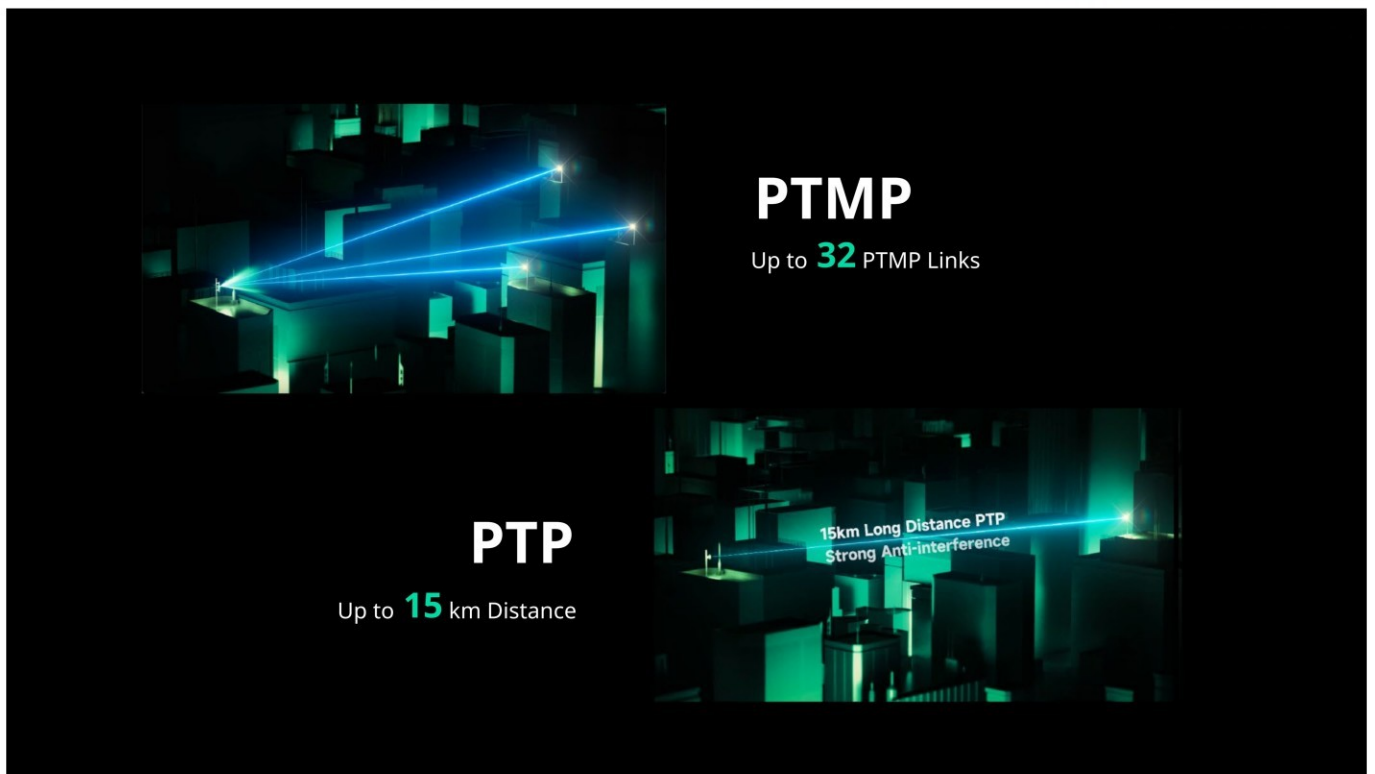
Highlight Features



Still Stable

Fearless of Harsh Environment

- IP65**
Weatherproof
- 220.32 km/h (137 mph)**
Wind Survivability
- 6 kV**
Surge Protection
- 24 kV**
24 kV Contact/ Air ESD



PTMP

Up to **32** PTMP Links

PTP

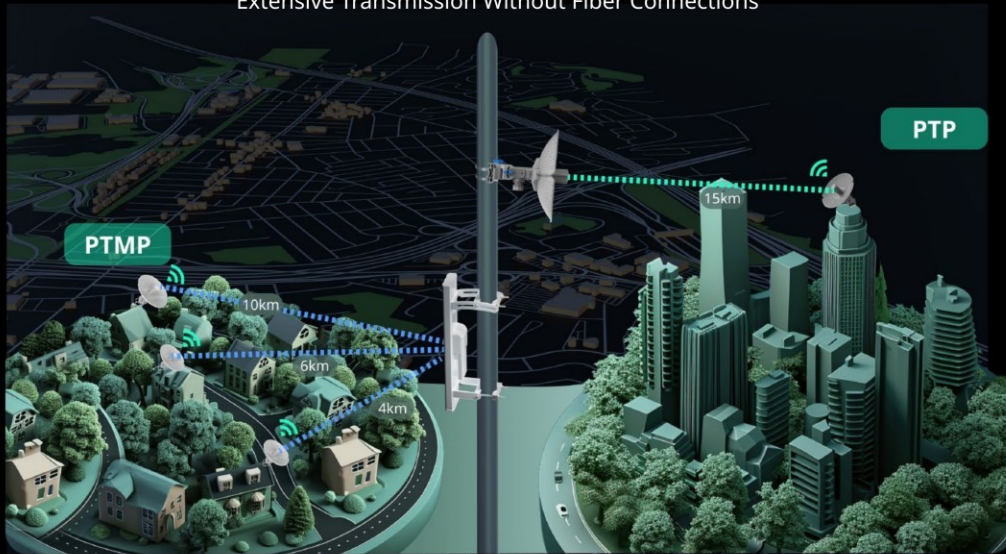
Up to **15** km Distance

15km Long Distance PTP
Strong Anti-interference

Highlight Features

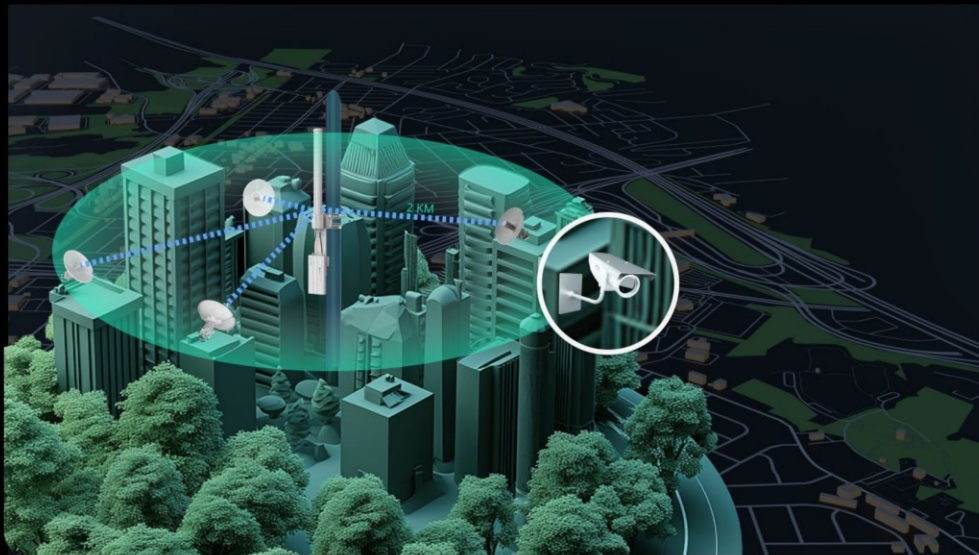
WISP

Extensive Transmission Without Fiber Connections



CCTV

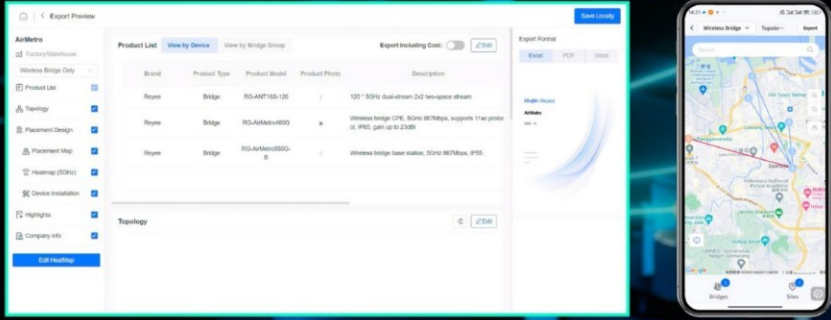
Affordable Excellence and Smooth Surveillance



Highlight Features

AI Heatmap for Bridge

Your Real Outdoor Adventure Companion



The screenshot shows the 'Export Preview' interface for the AI Heatmap for Bridge. It features a sidebar with navigation options like 'Product List', 'Topology', and 'Placement Map'. The main area displays a table of products:

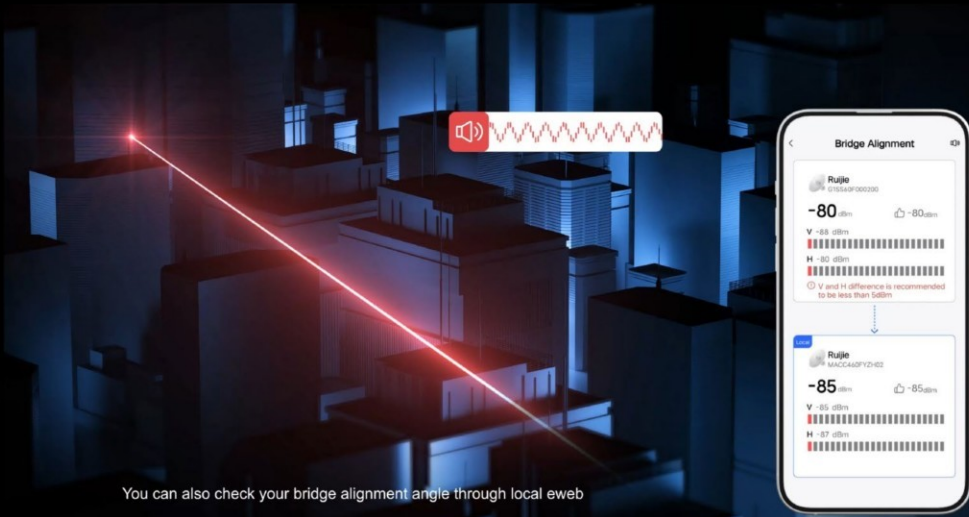
| Brand | Product Type | Product Model | Product Photo | Description |
|--------|--------------|---------------|---------------|--|
| Ruijie | Bridge | RG-AW7165-L20 | | 100+ 80MHz dual-stream 2x2 wireless stream |
| Ruijie | Bridge | RG-AW6000-050 | | Wireless bridge CPE, 80MHz 802.11n, supports 11ac power of IPED, gain up to 20dB |
| Ruijie | Bridge | RG-AW6000-050 | | Wireless bridge base station, 80MHz 802.11n, IPED |

Below the table is a 'Topology' section. To the right, there is an 'Export Preview' section with options for 'Excel', 'PDF', and 'Word'. A mobile phone on the right displays a map with a heatmap overlay, showing signal strength across a geographic area.

Available on both Ruijie Cloud and Ruijie Reyee App

Alignment Tool

Your Big-Voice, Time-Saver Guide



The screenshot shows the 'Bridge Alignment' interface on a mobile phone. It displays a 3D city model with a red laser line indicating the bridge alignment. A speaker icon and a waveform are visible above the phone. The phone screen shows the following data:

Bridge Alignment

Ruijie
010549060200

-80 dBm

V -85 dBm

H -80 dBm

V and H difference is recommended to be less than 5dBm

Ruijie
MacC45P2142

-85 dBm

V -85 dBm

H -87 dBm

You can also check your bridge alignment angle through local eweb

Highlight Features

Spectrum Scan and Link Optimization

Thumbs-Up Guide



Available on both Ruijie Cloud and Ruijie Reyee App

Cloud: Make Your Business Easy

- Quick Setup
- All-in-one Cloud
- Monitoring based on Real, Complete Topology
- Identifying Issues by Auto-Alarm



/ Product Information

| Model | RG-AirMetro460G |
|--------------|-----------------|
| Product Type | Bridge |
| Accessory | No |

/ Hardware Specifications

| Model | RG-AirMetro460G |
|-----------------------------|---|
| Applicable Scenarios | |
| Applicable Scenarios | CCTV/WISP |
| Wi-Fi Radio | |
| Radio design | Dual-radio 3 spatial streams <ul style="list-style-type: none"> • Radio 1: 2.4 GHz, 1 spatial stream: 1 x 1, SISO • Radio 2: 5 GHz, 2 spatial streams: 2 x 2, MIMO |
| Operating band | IEEE 802.11b/g/n: 2.400 GHz to 2.483 GHz IEEE 802.11a/n/ac: 5.150 GHz to 5.350 GHz IEEE 802.11a/n/ac: 5.470 GHz to 5.725 GHz IEEE 802.11a/n/ac: 5.725 GHz to 5.850 GHz Note: Available bands vary with countries and regions. To use the preceding frequency bands, ensure that your country or region supports these frequency bands. For details, see Channels for Countries & Regions (official website link to be added). |
| Wi-Fi standard | Wi-Fi 5 (IEEE 802.11ac) standard, compatible with IEEE 802.11a/b/g/n standards |
| 2.4 GHz Wi-Fi | Wi-Fi 4 (IEEE 802.11b/g/n) |
| 5 GHz Wi-Fi | Wi-Fi 5 (IEEE 802.11ac) |
| 2.4 GHz channel width | Auto/20/40 MHz |
| 5 GHz channel width | Auto/20/40/80 MHz |
| Transmission rate | Maximum wireless data rate: 1166 Mbps <ul style="list-style-type: none"> • Radio 1: 2.4 GHz, 300 Mbps • Radio 2: 5 GHz, 866 Mbps |
| Maximum transmit power | Frequency bands and maximum Effective Isotropic Radiated Power (EIRP): |

Hardware Specifications

| Model | RG-AirMetro460G |
|---|--|
| | <p>Note: Country specific restrictions apply.</p> <p>European Union & United Kingdom: 2400–2483.5 MHz, EIRP ≤ 20 dBm 5470–5725 MHz, EIRP ≤ 30 dBm</p> <p>Myanmar: 2400–2483.5 MHz, EIRP ≤ 23 dBm 5725–5850 MHz, EIRP ≤ 30 dBm</p> <p>Thailand: 2400–2483.5 MHz, EIRP ≤ 20 dBm 5150–5350 MHz, EIRP ≤ 23 dBm 5470–5725 MHz, EIRP ≤ 30 dBm 5725–5850 MHz, EIRP ≤ 30 dBm</p> <p>Indonesia: 2400–2483.5 MHz, EIRP ≤ 36 dBm 5725–5825 MHz, EIRP ≤ 36 dBm</p> <p>Egypt: 2400–2483.5 MHz, EIRP ≤ 20 dBm 5150–5350 MHz, EIRP ≤ 23 dBm</p> <p>Vietnam: 2400–2483.5 MHz, EIRP ≤ 23 dBm 5150–5350 MHz, EIRP ≤ 23 dBm 5470–5725 MHz, EIRP ≤ 30 dBm 5725–5850 MHz, EIRP ≤ 30 dBm</p> |
| Maximum transmit power (2.4 GHz) | Combined power: 20 dBm (single stream power: 20 dBm) Note: The transmit power varies according to regulations in different countries and regions. |
| Maximum transmit power (5 GHz) | Combined power: 29 dBm (single stream power: 26 dBm) Note: The transmit power varies according to regulations in different countries and regions. |
| Receive sensitivity | 802.11b: -91 dBm (1 Mbps), -88 dBm (5 Mbps), -85 dBm (11 Mbps) 802.11a/g: -89 dBm (6 Mbps), -80 dBm (24 Mbps), -76 dBm (36 Mbps), -71 dBm (54 Mbps) 802.11n: -83 dBm@MCS0, -65 dBm@MCS7, -83 dBm@MCS8, -65 dBm@MCS15 802.11ac HT20: -83 dBm (MCS0), -57 dBm (MCS9) 802.11ac HT40: -79 dBm (MCS0), -54 dBm (MCS9) 802.11ac HT80: -76 dBm (MCS0), -51 dBm (MCS9) |
| Modulation | 802.11b: BPSK, QPSK, CCK 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM |
| Highest QAM order | 256 |
| Antenna | |

Hardware Specifications

| Model | RG-AirMetro460G |
|-------------------------------------|--|
| Antenna | 2.4 GHz: 1 x 1 Built-in omnidirectional antenna 5 GHz: 2 x 2 External directional antenna with built-in feed source, horizontal: 9°, vertical: 9° |
| Antenna gain (2.4 GHz) | 3 dBi |
| Antenna gain (5 GHz) | 23 dBi |
| Antenna horizontal orientation | 9° |
| Antenna vertical orientation | 9° |
| System Specifications | |
| CPU | Dual-core processor, 880 MHz clock frequency per core |
| Flash memory | 16 MB |
| RAM | 128 MB DDR3 |
| Dimensions and Weight | |
| Weight | 0.20 kg (0.44 lbs) (without packaging materials) |
| Shipping weight | 2.56 kg (5.65 lbs) |
| Product dimensions (W x D x H) | 368.5 mm x 271 mm x 368.5 mm (14.51 in. x 10.67 in. x 14.51 in.) (Dimensions of the device after installation, including the mounting bracket.) |
| Package dimensions (W x D x H) | 404 mm x 256 mm x 147 mm (15.91 in. x 10.08 in. x 5.79 in.) |
| Color | Gray |
| Port Specifications | |
| Number of fixed LAN ports | 1 |
| Number of 10/100/1000BASE-T ports | 1 |
| Reset button | 1 |
| LEDs | 1 x system status LED 1 x Ethernet port LED 3 x signal status LEDs |
| Power Supply and Consumption | |
| Power supply | Passive PoE adapter |

Hardware Specifications

| Model | RG-AirMetro460G |
|--|--|
| Power input | Passive PoE adapter: <ul style="list-style-type: none"> • Rated input voltage: 100 V AC to 240 V AC, 50 Hz to 60 Hz • Rated input current: 0.5 A Max • Rated output voltage: 24 V DC • Maximum output current: 0.6 A |
| Number of PoE In ports | 1 |
| Maximum power consumption | 12 W |
| Environment and Reliability | |
| Mounting options | Pole |
| Operating temperature | -40°C to +70°C (-40°F to +158°F) |
| Storage temperature | -40°C to +85°C (-40°F to +185°F) |
| Operating humidity | 5% RH to 95% RH (non-condensing) |
| Storage humidity | 5% RH to 95% RH (non-condensing) |
| Altitude | Operating altitude: -500 m to +5,000 m (-1,640.42 ft. to +16,404.20 ft.) Storage altitude: -500 m to +5,000 m (-1,640.42 ft. to +16,404.20 ft.) |
| MTBF | 400,000 hours (about 45 years) |
| Cooling | Natural cooling |
| IP rating | IP65 |
| ESD protection | Standard test: contact discharge=24 kV, air discharge=24 kV, Class B |
| Surge protection | Service port: ±6 kV for common mode Power connector: ±4 kV for common mode and ±2 kV differential mode |
| Certification and Regulatory Compliance | |
| Safety compliance | EN62368-1 |
| EMC | EN 55032 EN 55035 EN 61000-3-3 EN 61000-3-2 EN 301489-1 |

Hardware Specifications

| Model | RG-AirMetro460G |
|---------------|-----------------------------|
| | EN 301489-3 EN 301489-17 |
| Certification | CE, FCC, CB, ISED, cTUVus |

Software Specifications

| Model | RG-AirMetro460G |
|--|--|
| WLAN | |
| BaseStation/CPE mode switching | Yes |
| Enhanced one-to-many transmission (TDMA) | Yes |
| Bridge SSID hiding | Yes |
| WPA2-PSK encryption | Yes |
| WPA-PSK encryption | No |
| WPA/WPA2-PSK encryption | No |
| Recommended channel | Yes |
| Bridge speed test | Yes |
| Random security key upon configuration delivery | No |
| Configuring a security key for network-wide bridges | Yes |
| Configuring a security key for a single bridge group | Yes |
| Configuring a security key for a single bridge | Yes |
| Bridge SSID, channel, and power configuration | Yes |
| WMM | Yes |
| Maximum PTMP connections | 1 |
| Maximum bridge distance | 15 km (9.32 miles) |
| One-touch pairing | Yes |
| Maximum effective distance of one-touch pairing | 20 m (65.62 ft.) |
| Bridge performance | 230 Mbps/1 km (0.62 miles) (HT40) 200 Mbps/3 km (1.86 miles) (HT40) 150 Mbps/5 km (3.11 miles) (HT40) 80 Mbps/10 km (6.21 miles) (HT40) |
| RSSI | - 58 dBm/1 km (0.62 miles) - 66 dBm/3 km (1.86 miles) |

Software Specifications

| Model | RG-AirMetro460G |
|---|---|
| | <ul style="list-style-type: none"> - 70 dBm/5 km (3.11 miles) - 78 dBm/10 km (6.21 miles) |
| Recommended number of connected cameras (3 Mbps) | <ul style="list-style-type: none"> 50/1 km (0.62 miles) 45/3 km (1.86 miles) 20/5 km (3.11 miles) 16/10 km (6.21 miles) |
| Recommended number of connected cameras (4 - 5 Mbps) | <ul style="list-style-type: none"> 30/1 km (0.62 miles) 25/3 km (1.86 miles) 12/5 km (3.11 miles) 8/10 km (6.21 miles) |
| Recommended number of connected cameras (6 - 7 Mbps) | <ul style="list-style-type: none"> 20/1 km (0.62 miles) 13/3 km (1.86 miles) 8/5 km (3.11 miles) 5/10 km (6.21 miles) |
| Recommended number of connected cameras (7-8 Mbps code streams) | <ul style="list-style-type: none"> 15/1 km (0.62 miles) 12/3 km (1.86 miles) 6/5 km (3.11 miles) 4/10 km (6.21 miles) |
| Real-time signal strength | Yes |
| Optimal signal strength | Yes |
| Active/Standby channel | Yes |
| Restoring to the active channel | Yes |
| Maximum number of devices on the SON | 200 |
| Basic Configurations | |
| eWeb login with the username and password | Yes |
| Local upgrade | Yes |
| Configuration backup | Yes |
| System language | Chinese (Simplified), English |
| System time settings | Yes |
| Ethernet Switching | |
| Interface rate | 10/100/1000 Mbps auto-negotiation |

Software Specifications

| Model | RG-AirMetro460G |
|--|---|
| VLAN | Yes |
| Link aggregation | No |
| IP Service | |
| IPv4 ping | Yes |
| IPv4 traceroute | Yes |
| DHCP server | Yes |
| DHCP client | Yes |
| Security | |
| Broadcast storm control | Yes |
| Network Management and Monitoring | |
| SON | Yes |
| AI heatmap | Yes |
| Camera detection | No |
| Network-wide management SSID configuration | Yes |
| Network connection through the management SSID | No |
| Ruijie Cloud management | Yes |
| Restarting devices through Ruijie Reyee App | Yes |
| SNMPv1, v2c, and v3 | Yes |
| Fault diagnosis | Yes Note: support for network tools (ping, traceroute, and nslookup), fault alarms, and fault collection |
| Restart cause prompt | Yes |
| Disconnection cause prompt | Yes |
| Cloud alarms on DFS signal detection | Yes |

Package Contents

| Model | RG-AirMetro460G |
|------------------------|---|
| Device | |
| Device | 1 |
| Parabolic dish antenna | 2 |
| Accessories | |
| Hose clamp | 2 |
| Power adapter | 1 Note: 24 V passive PoE adapter |
| Power cord | 1 |
| Mounting bracket | 1 x Pole mounting plate 1 x Mounting bracket 1 x Antenna base |
| Screw | 10 x Phillips pan head screws 2 x hex head machine screws M5 x 65 mm 1 x M5 nut |
| Cable gland | 1 |
| Manual | |
| User Manual | 1 |
| Warranty Card | 1 |

Ruijie | ReYee

 Redefine your easy network



Ruijie Networks Co., Ltd.

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