

RG-AirMetro550G-B

Base Station of RG-AirMetro Series Wireless Bridges



Highlights

- Up to 10 km Wireless Transmission Distance
- MAX. 1:32 PTMP Links, Easy Pairing in 30 sec
- 2 x GE Ports: More Possibilities of Connections
- 24 V Passive PoE and 12 V DC Input: Solar Power Supply
- IP55, 6 kV Surge Protection and ± 24 kV ESD against Harsh Environment
- All-in-one Cloud Management Simplifies the User Journey

Highlight Features



RG-AirMetro Series Wireless Bridges

After pairing, the bridges support:

10 km

Up to 10 km
Wireless Transmission

32 PTMP

Up to 32 PTMP
Links



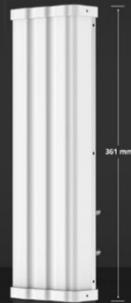
Easy Site Survey
Tool



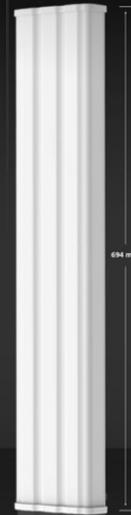
All-in-One Cloud
Management



RG-AirMetro550G-B



RG-ANT16S-120



RG-ANT20S-90



RG-ANT13-360

/ Highlight Features

A Perfect Match for Different Devices and Scenarios



RP-SMA
Connectors

Fast Pairing

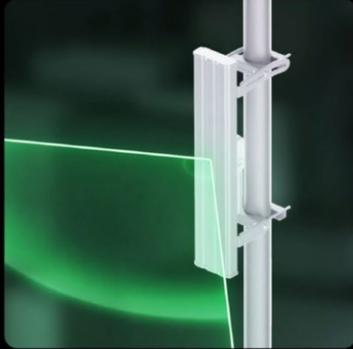
One-Touch Pairing All in 30 sec



Highlight Features

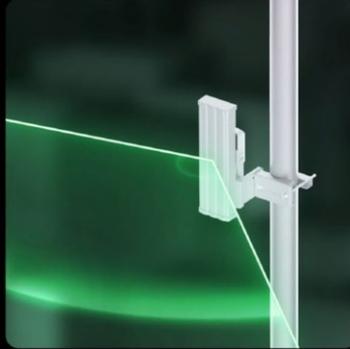
Antennas

Triple Devices, Beyond Triple Choices



RG-ANT20S-90

5 GHz, 20 dBi
H: 90°, V: 7°
10 km



RG-ANT16S-120

5 GHz, 16 dBi
H: 120°, V: 10°
5 km



RG-ANT13-360

5 GHz, 13 dBi
H: 360°, V: 7°
2 km

Still Stable

Fearless of Harsh Environment

IP55

IP55
Weatherproof



220.32 km/h
(137 mph)
Wind Survivability

6kV

6 kV
Surge Protection

24kV

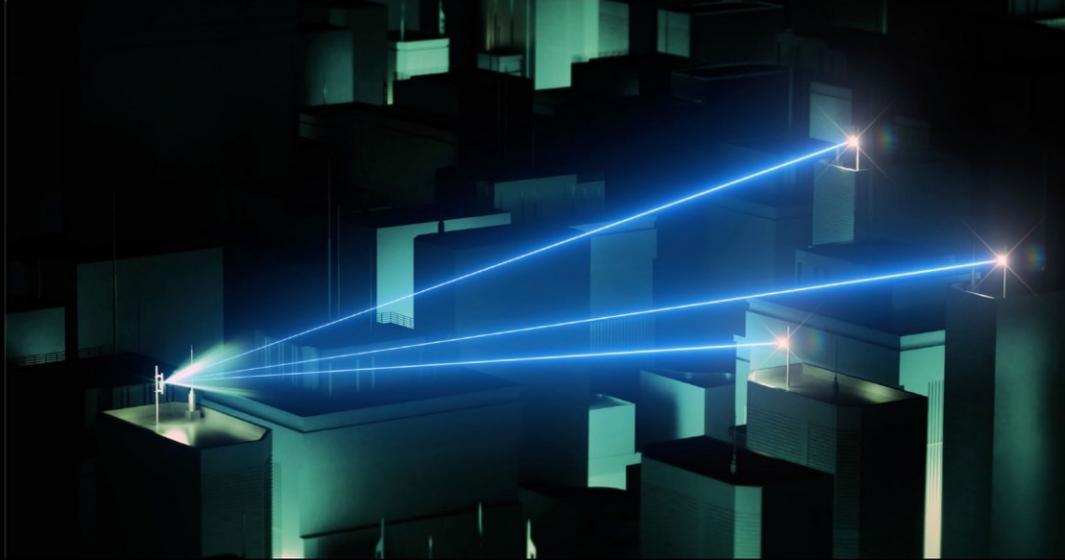
24 kV
Contact/ Air
ESD



Highlight Features

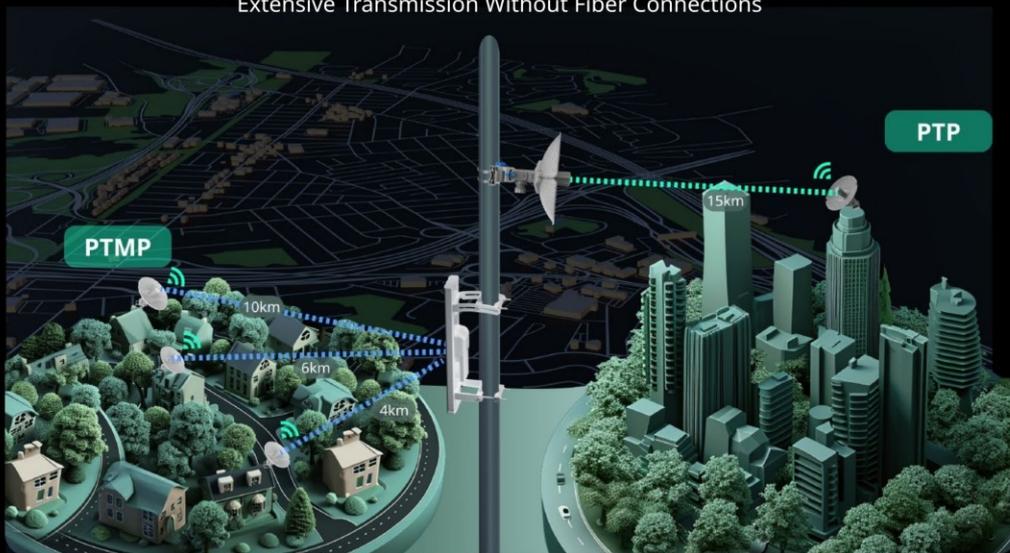
PTMP

Up to 32 PTMP Links



WISP

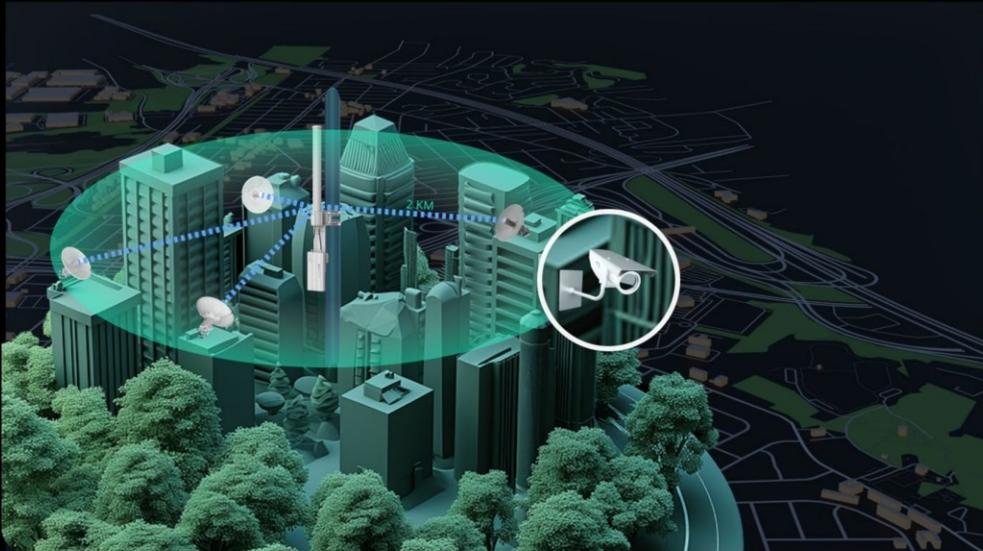
Extensive Transmission Without Fiber Connections



Highlight Features

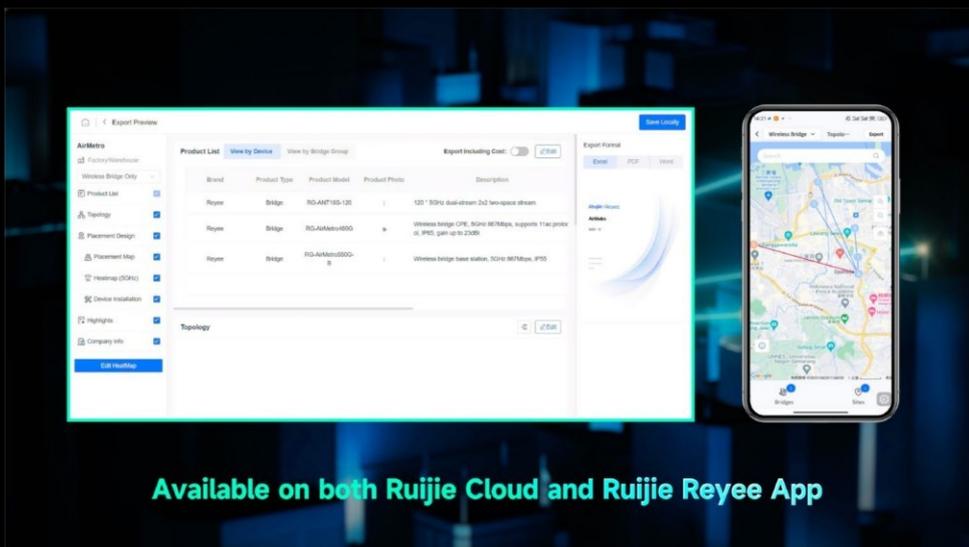
CCTV

Affordable Excellence and Smooth Surveillance



AI Heatmap for Bridge

Your Real Outdoor Adventure Companion

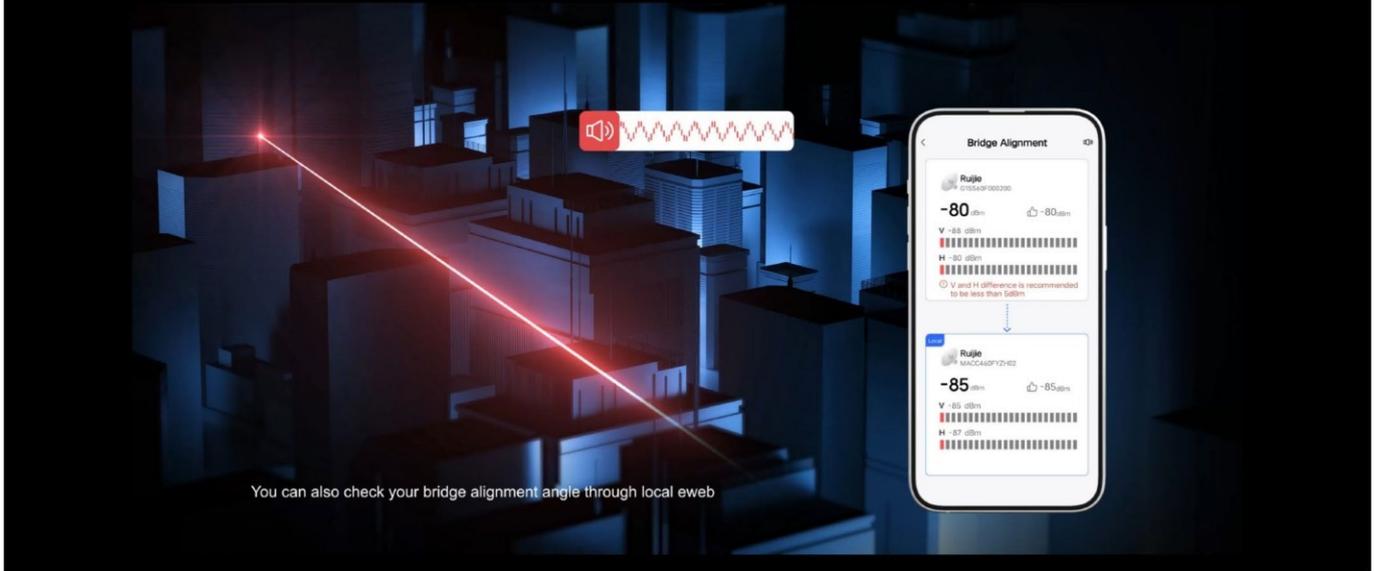


Available on both Ruijie Cloud and Ruijie Reyee App

Highlight Features

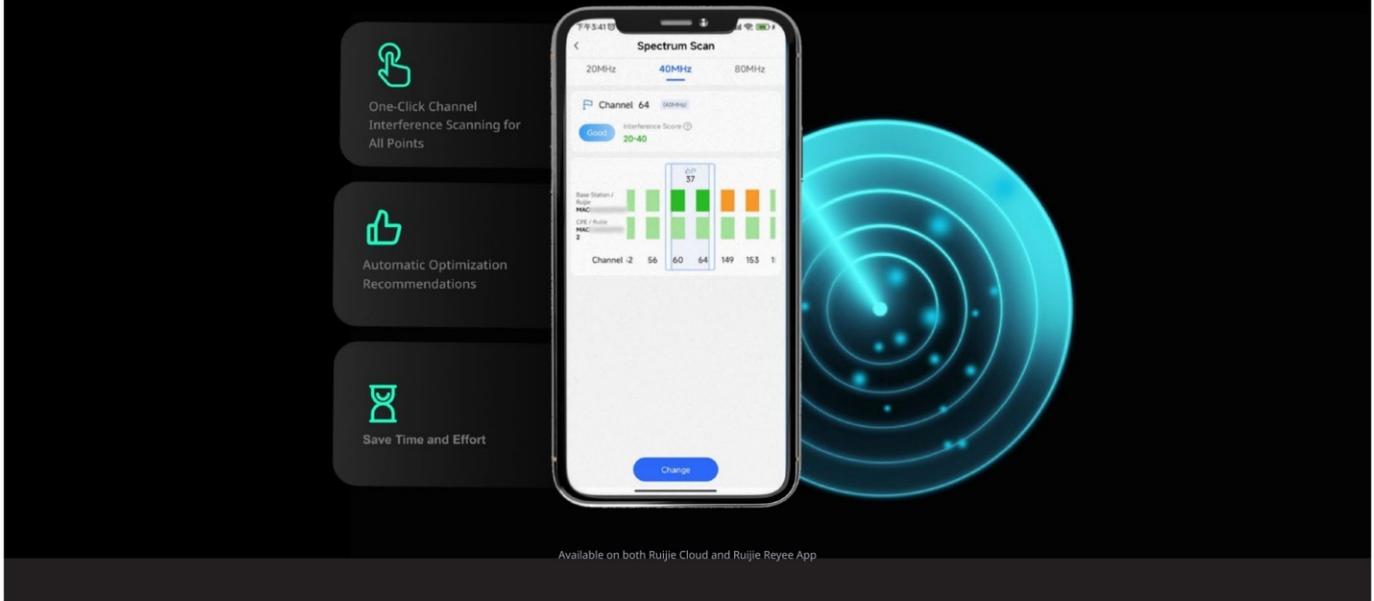
Alignment Tool

Your Big-Voice, Time-Saver Guide



Spectrum Scan and Link Optimization

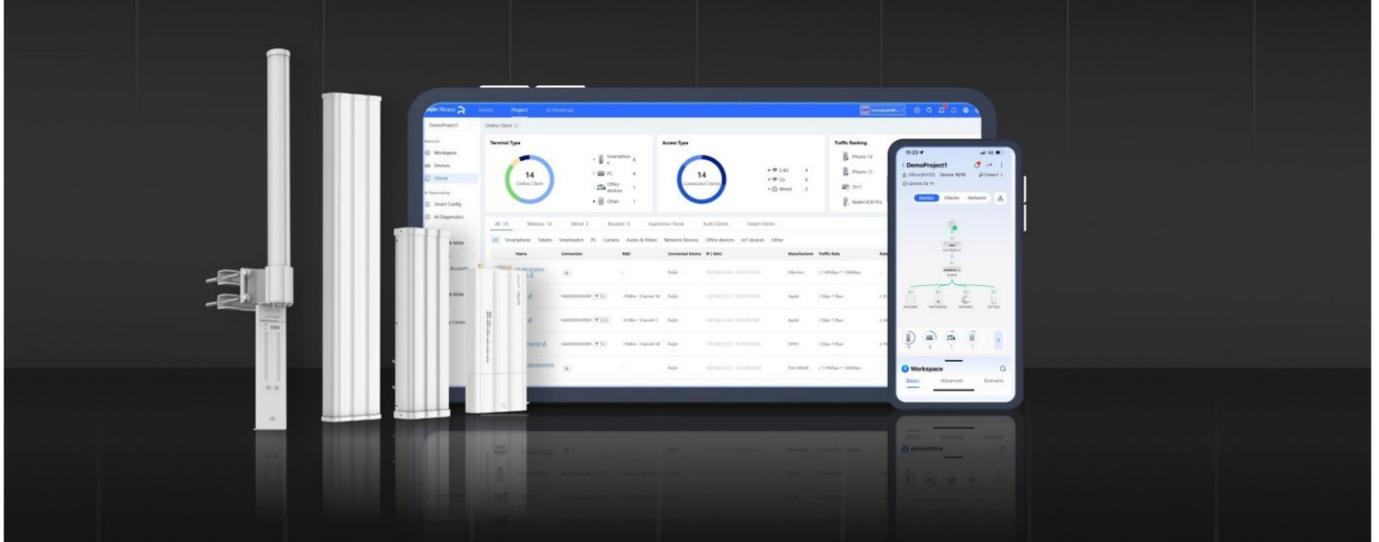
Thumbs-Up Guide



Highlight Features

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-AirMetro550G-B
Product Type	Bridge
Accessory	No

/ Hardware Specifications

Model	RG-AirMetro550G-B
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-AirMetro550G-B
	<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-AirMetro550G-B
Antenna	2.4 GHz: 1 x 1 Built-in omnidirectional antenna Note: The 2.4 GHz band is used for device management. External antennas are required for data transmission between bridges.
Antenna gain (2.4 GHz)	3 dBi
Third-party antenna	Yes
System Specifications	
CPU	Dual-core processor, 880 MHz clock frequency per core
Flash memory	16 MB
RAM	128 MB DDR3
Dimensions and Weight	
Weight	0.31 kg (0.68 lbs) (without packaging materials)
Shipping weight	0.68 kg (1.5 lbs)
Product dimensions (W x D x H)	98.5 mm x 29 mm x 200 mm (3.88 in. x 1.14 in. x 7.87 in.) (excluding mounting bracket)
Package dimensions (W x D x H)	255 mm x 209.5 mm x 61 mm (10.04 in. x 8.25 in. x 2.40 in.)
Color	Elegant white
Port Specifications	
Number of fixed LAN ports	2
Number of 10/100/1000BASE-T ports	2
Reset button	1
LEDs	1 x system status LED 2 x Ethernet port LEDs 3 x signal status LEDs
Power Supply and Consumption	
Power supply	Power supply options: <ul style="list-style-type: none">• DC power adapter• Passive PoE adapter
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

Hardware Specifications

Model	RG-AirMetro550G-B
	<ul style="list-style-type: none"> • 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
Local power supply	Yes, one DC power connector (12 V, 1 A)
Dimensions of the DC connector	Outer Diameter: 5.50 mm \pm 0.05 mm (0.22 in. \pm 0.002 in.) Inner Diameter: 2.10 mm \pm 0.05 mm (0.08 in. \pm 0.002 in.) Depth: 9 mm (0.35 in.)
Maximum power consumption	12 W
Environment and Reliability	
Mounting options	Pole
Operating temperature	-40°C to +80°C (-40°F to +176°F)
Storage temperature	-40°C to +85°C (-22°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	IP55
ESD protection	Standard test: contact discharge=24 kV, air discharge=24 kV, Class B
Surge protection	Service port: \pm 6 kV for common mode Power connector: \pm 4 kV for common mode and \pm 2 kV differential mode
Certification and Regulatory Compliance	
Safety compliance	EN62368-1
EMC	EN 55032 EN 55035 EN 61000-3-3

Hardware Specifications

Model	RG-AirMetro550G-B
	EN 61000-3-2 EN 301489-1 EN 301489-3 EN 301489-17
Certification	CE, FCC, CB, ISED, cTUVus

Software Specifications

Model	RG-AirMetro550G-B
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	32
Maximum bridge distance	2 km (1.24 miles) (installing the device on the RG-ANT13-360) 5 km (3.11 miles) (installing the device on the RG-ANT16S-120) 10 km (6.21 miles) (installing the device on the RG-ANT20S-90)
One-touch pairing	Yes
Maximum effective distance of one-touch pairing	5 m (16.4 ft.)
Bridge performance	Installing the device on the RG-ANT13-360: 179 Mbps/1 km (0.62 miles) (HT40) 111 Mbps/2 km (1.24 miles) (HT40) Installing the device on the RG-ANT16S-120: 204 Mbps/1 km (0.62 miles) (HT40)

Software Specifications

Model	RG-AirMetro550G-B
	<p>153 Mbps/3 km (1.86 miles) (HT40) 94 Mbps/5 km (3.11 miles) (HT40) Installing the device on the RG-ANT20S-90: 204 Mbps/3 km (1.86 miles) (HT40) 153 Mbps/5 km (3.11 miles) (HT40) 77 Mbps/10 km (6.21 miles) (HT40)</p>
RSSI	<p>Installing the device on the RG-ANT13-360: -64 dBm/1 km (0.62 miles) -70 dBm/2 km (1.24 miles) Installing the device on the RG-ANT16S-120: -58 dBm/1 km (0.62 miles) (HT40) -66 dBm/3 km (1.86 miles) (HT40) -72 dBm/5 km (3.11 miles) (HT40) Installing the device on the RG-ANT20S-90: -60 dBm/3 km (1.86 miles) (HT40) -66 dBm/5 km (3.11 miles) (HT40) -73 dBm/10 km (6.21 miles) (HT40)</p>
Recommended number of connected cameras (3 Mbps)	<p>Installing the device on the RG-ANT13-360: 41/1 km (0.62 miles) 26/2 km (1.86 miles) Installing the device on the RG-ANT20S-120: 47/1 km (0.62 miles) 35/3 km (1.86 miles) 22/5 km (3.11 miles) Installing the device on the RG-ANT20S-90: 47/3 km (1.86 miles) 35/5 km (3.11 miles) 18/10 km (6.21 miles)</p>
Recommended number of connected cameras (4 - 5 Mbps)	<p>Installing the device on the RG-ANT13-360: 25/1 km (0.62 miles) 15/2 km (1.24 miles) Installing the device on the RG-ANT16S-120: 28/1 km (0.62 miles) 21/3 km (1.86 miles) 13/5 km (3.11 miles) Installing the device on the RG-ANT20S-90: 28/3 km (1.86 miles) 21/5 km (3.11 miles) 10/10 km (6.21 miles)</p>
Recommended number of connected cameras (6 - 7 Mbps)	<p>Installing the device on the RG-ANT13-360: 18/1 km (0.62 miles) 11/2 km (1.24 miles) Installing the device on the RG-ANT16S-120: 20/1 km (0.62 miles)</p>

Software Specifications

Model	RG-AirMetro550G-B
	15/3 km (1.86 miles) 9/5 km (3.11 miles) Installing the device on the RG-ANT20S-90: 28/3 km (1.86 miles) 21/5 km (3.11 miles) 10/10 km (6.21 miles)
Recommended number of connected cameras (7-8 Mbps code streams)	Installing the device on the RG-ANT13-360: 15/1 km (0.62 miles) 9/2 km (1.24 miles) Installing the device on the RG-ANT16S-120 17/1 km (0.62 miles) 13/3 km (1.86 miles) 8/5 km (3.11 miles) Installing the device on the RG-ANT20S-90: 17/3 km (1.86 miles) 13/5 km (3.11 miles) 6/10 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
VLAN	Yes

Software Specifications

Model	RG-AirMetro550G-B
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-AirMetro550G-B
Device	
Device	1
Accessories	
Power adapter	1 Note: 24 V passive PoE adapter
Power cord	1
Manual	
User Manual	1
Warranty Card	1

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 Redefine your easy network



Ruijie Networks Co., Ltd.

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