RG-EST350G
5 km, 16 dBi Wireless Bridge

Highlights

- 3 x GE Ports

- Support 3 Power Supply Options: 12 V DC, Passive PoE, 802.3af/at

- Automatic PTP Pairing

- One-Touch Pairing for PTMP Mode

- Support TDMA

- Support SON

/ Highlight Features

RG-EST350G

5 km Working Distance EST Bridge

Automatic PTP Pairing

| 5 GHz, 867 Mbps | H: 31°, V: 14° | 16 dBi | 5 km distance | IP55 Weatherproof | TDMA |
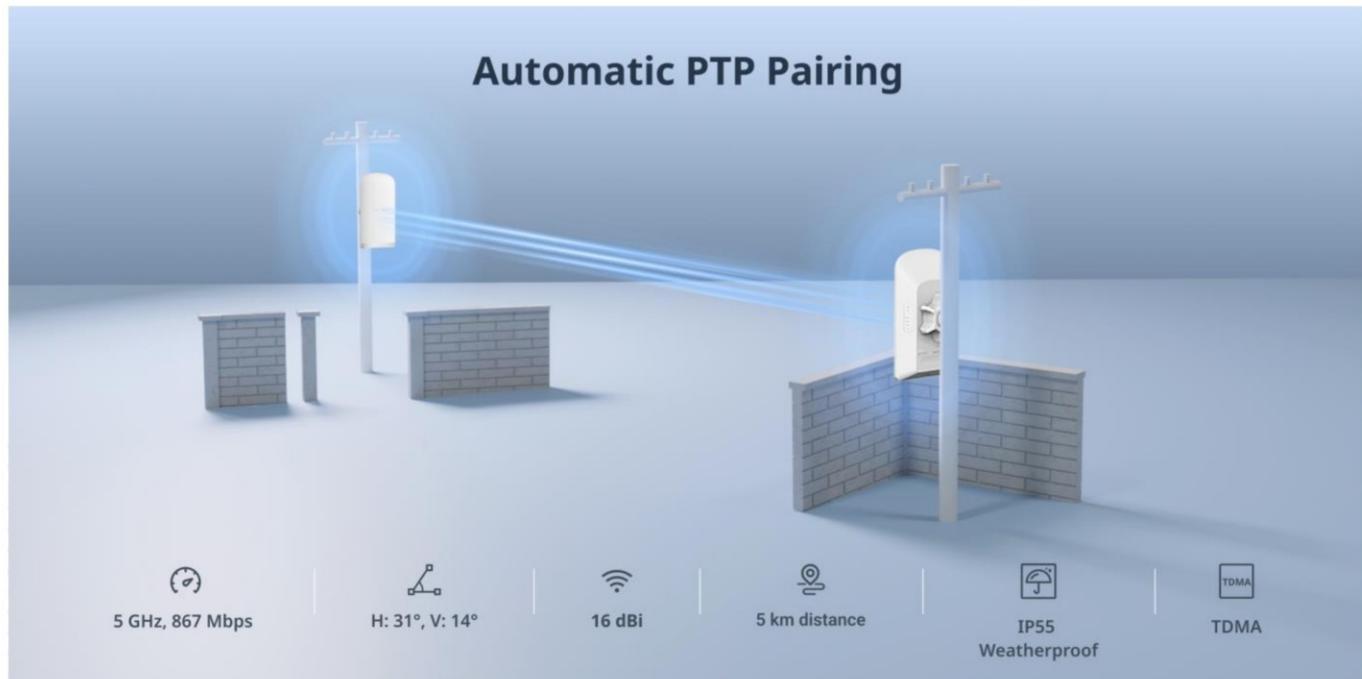
Triple Power Input Options for Flexible Deployment

12 V DC
Solar Power Supply

802.3af/at

or

or

Passive PoE

or

3 x GE Ports

3-Year Warranty

Bridging for TDMA-Powered Devices of Different Series

The new EST and AirMetro can be mixed for bridging with TDMA enabled

RG-EST350G

RG-EST450G

RG-EST350G

RG-EST350G

RG-EST330F-P

RG-AirMetro460F

PTP

PTMP
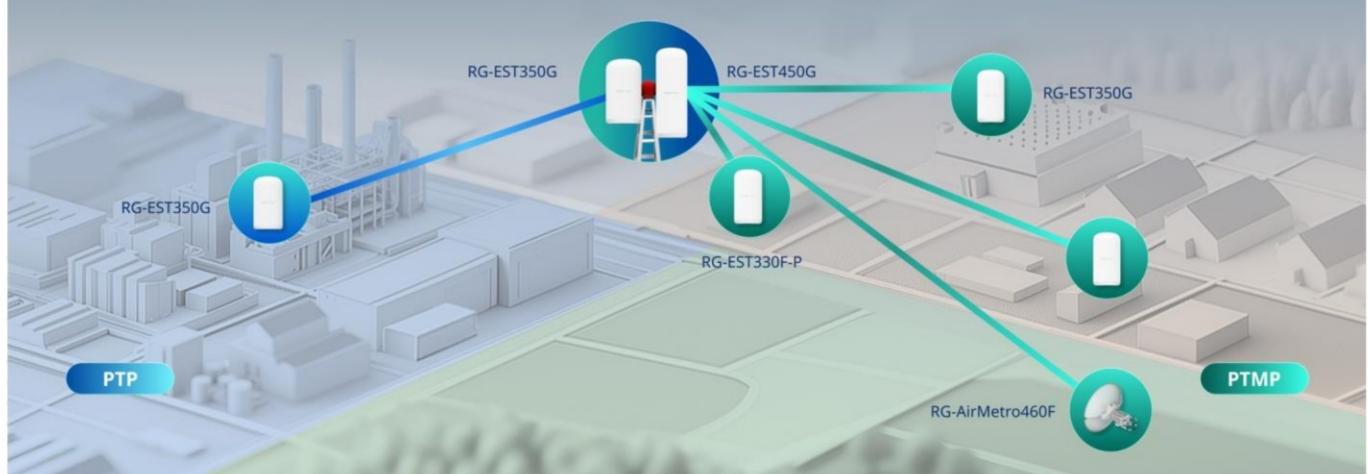
Cloud, Make Your Business Easy

SON

Alignment Tool

Spectrum Scan

Monitoring & Configuration

Quick Self-Organizing Network for Bridge
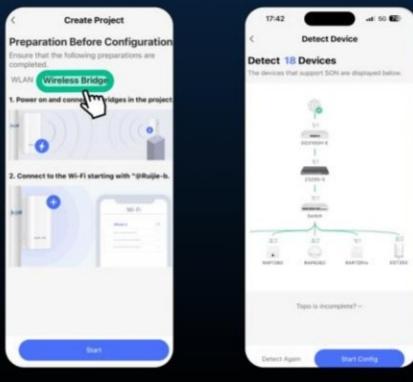
Product Information

Model	RG-EST350G
Product Type	Bridge
Accessory	No

Hardware Specifications

Model	RG-EST350G
Applicable Scenarios	
Applicable Scenarios	CCTV
Wi-Fi Radio	
Radio design	Dual-radio 3 spatial streams ● 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 ● 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-EST350G
	Note: Country specific restrictions apply. European Union & United Kingdom: 2400–2483.5 MHz, EIRP ≤ 20 dBm 5470–5725 MHz, EIRP ≤ 30 dBm Myanmar: 2400–2483.5 MHz, EIRP ≤ 23 dBm 5725–5850 MHz, EIRP ≤ 30 dBm 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 Indonesia: 2400–2483.5 MHz, EIRP ≤ 36 dBm 5725–5825 MHz, EIRP ≤ 36 dBm Egypt: 2400–2483.5 MHz, EIRP ≤ 20 dBm 5150–5350 MHz, EIRP ≤ 23 dBm 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
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-EST350G
Antenna	2.4 GHz: 1 x 1 Built-in omnidirectional antenna 5 GHz: 2 x 2 Built-in directional antenna, horizontal: 31°, vertical: 14°
Antenna gain (2.4 GHz)	2 dBi
Antenna gain (5 GHz)	16 dBi
Antenna horizontal orientation	31°
Antenna vertical orientation	14°
System Specifications	
CPU	Dual-core processor, 880 MHz clock frequency per core
Flash memory	16 MB
RAM	128 MB DDR3
Dimensions and Weight	
Weight	0.56 kg (1.24 lbs) (without packaging materials)
Shipping weight	2.55 kg (5.62 lbs)
Product dimensions (W x D x H)	133mm x 108 mm x 240 mm (5.24 in. x 4.25 in. x 9.45 in.) (excluding mounting bracket)
Package dimensions (W x D x H)	394 mm x 311 mm x 104 mm (15.51 in. x 12.24 in. x 4.09 in.)
Color	Elegant white
Port Specifications	
Number of fixed LAN ports	3
Number of 10/100/1000BASE-T ports	3
Reset button	1
LEDs	1 x system status LED 3 x Ethernet port LEDs 3 x signal status LEDs
Power Supply and Consumption	
Power supply	Power supply options: ● DC power adapter ● Passive PoE injector

Hardware Specifications

Model	RG-EST350G
Power input	DC power adapter: ● Rated input voltage: 100 V AC to 240 V AC, 50 Hz to 60 Hz ● Rated input current: 0.5 A Max. Output： ● Rated output voltage: 24 V DC ● Maximum output current: 0.6 A Passive PoE injector: ● Rated input voltage: 24 V DC ● Rated input current: 0.6 A Output： ● Rated output voltage: 24 V DC ● Maximum output current: 0.6 A
Number of PoE In ports	1
Number of PoE/PoE+ In ports	1
Local power supply	Yes, one DC power connector (12 V, 1.2 A)
Dimensions of the DC connector	Outer Diameter: 5.50 mm ± 0.05 mm (0.22 in. ± 0.002 in.) Inner Diameter: 2.10 mm ± 0.05 mm (0.08 in. ± 0.002 in.) Depth: 9 mm (0.35 in.)
Maximum power consumption	12 W
Environment and Reliability	
Mounting options	Wall/Pole
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	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

Hardware Specifications

Model	RG-EST350G
ESD protection	Standard test: contact discharge=8 kV, air discharge=15 kV, Class B
Surge protection	Service port: ±4 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 EN 301489-3 EN 301489-17
Certification	CE, CB

Software Specifications

Model	RG-EST350G
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	16
Maximum bridge distance	5 km (3.11 miles)
One-touch pairing	Yes
Maximum effective distance of one-touch pairing	50 m (160.04 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)
RSSI	−56 dBm/1 km (0.62 miles) −64 dBm/3 km (1.86 miles) −68 dBm/5 km (3.11 miles)

Software Specifications

Model	RG-EST350G
Recommended number of connected cameras (3 Mbps)	50/1 km (0.62 miles) 45/3 km (1.86 miles) 20/5 km (3.11 miles)
Recommended number of connected cameras (4 – 5 Mbps)	30/1 km (0.62 miles) 25/3 km (1.86 miles) 12/5 km (3.11 miles)
Recommended number of connected cameras (6 – 7 Mbps)	20/1 km (0.62 miles) 13/3 km (1.86 miles) 8/5 km (3.11 miles)
Recommended number of connected cameras (7-8 Mbps code streams)	15/1 km (0.62 miles) 12/3 km (1.86 miles) 6/5 km (3.11 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
Link aggregation	No
IP Service	
IPv4 ping	Yes

/ Software Specifications

Model	RG-EST350G
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	Yes
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-EST350G
Device	
Device	2
Accessories	
Hose clamp	2
Power adapter	2 Note: 24 V/0.6 A DC power adapter
PoE injector	2
Mounting bracket	2 x Ball joint mount 2 x Lock ring 2 x Mounting bracket
Screw	6 x Wall anchors 8 x Phillips pan head screws (self-tapping screws 4.2 mm x 19 mm)
Manual	
User Manual	1
Warranty Card	1

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