RG-EST310 V2
5 GHz Dual-stream 802.11ac 1 km Wireless Bridge

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Highlights

- RG-EST310 V2 Provides Stable Traffic Transmission from 1 km Away
- Factory-Paired, auto-Rebridge upon Power Restoration
- IP54 Weatherproof, -30°C~55°C Ensures Stable Operating
- Cost-Effective Wireless Solution for Elevator CCTV to Avoid Cable Loss

Highlight Features

RG-EST310 V2

5GHz Single-band Dual-stream 802.11ac Wireless Bridge

2x2 MIMO 5GHz 2x2 MIMO
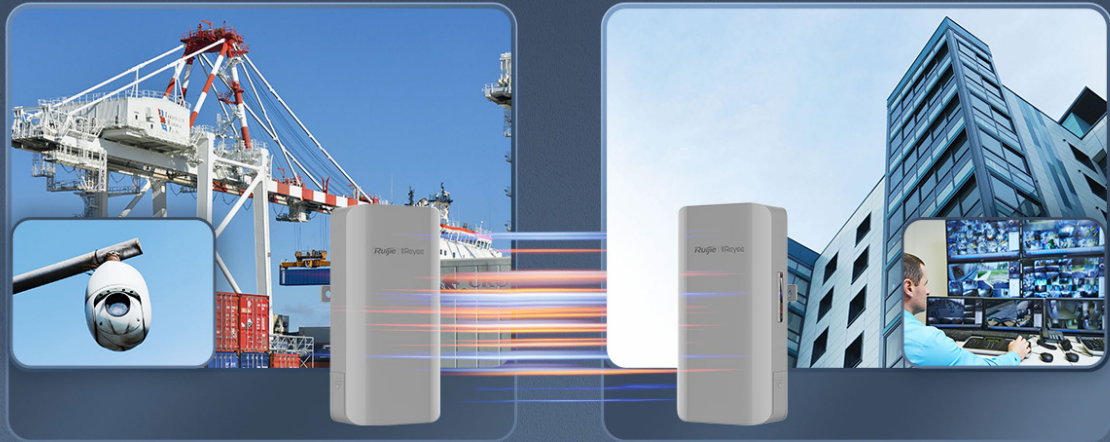
1 x FE Port

Not Limited to 1KM

Wireless bridge expert for CCTV scenario

867 Mbps

PTP/PTMP

Highlight Features

Strong Adaptability and High Scalability

🔥 V0 Level Flame Retardant	☂ IP54 Weatherproof	🌡 -30 to 55°C Operating Temperature

High Quality
High Performance

RG-EST310 V2 has adopted the new high-performance 5GHz single-band dual-stream chip solution, which offers up to 867Mbps wireless transmit rate and significantly enhances the efficiency and stability of network bridge data transmission.

Highlight Features

Cloud, Make Your Business Easy

/ Specifications

Model	RG-EST310 V2
Hardware Features	
Radio Design	5 GHz single-band dual-stream
2.4 GHz Band	No
5 GHz Band	Yes
Protocol and Standard	802.11ac/n/a
Wi-Fi 4/5/6/7	Wi-Fi 5
Spatial Streams	Two spatial streams, 2x2, MIMO
5G Channel Width	Auto/20/40/80 MHz
Receiver Sensitivity	11a: -89 dBm (6 Mbps), -80 dBm (24Mbps), -76 dBm (36 Mbps), -71 dBm (54 Mbps); 11n: -83 dBm@MCS0, -65 dBm@MCS7, -83 dBm@MCS8, -65 dBm@MCS15; 11ac: -86 dBm (MCS0), -63 dBm (MCS9)
Nominal Receive Sensitivity @20 MHz Channel	-91dBm (MCS0) TO -57dBm (MCS9)
Nominal Receive Sensitivity @40 MHz Channel	-83dBm (MCS0) TO -57dBm (MCS9)
Nominal Receive Sensitivity @80 MHz Channel	-76dBm (MCS0) TO -51dBm (MCS9)
Modulation Levels (Adaptive)	MCSO(BPSK)to MCS9 (256QAM)
Wi-Fi Protocols (5 GHz)	Wi-Fi 5 (IEEE 802.11ac)
Wireless Data Rate	867 Mbps
Wireless Data Rate (5 GHz)	867 Mbps

Model	RG-EST310 V2
Frequency Bands	5 GHz: 802.11a/n/ac: 5.150 GHz to 5.350 GHz, 5.470 GHz to 5.725 GHz, 5.725 GHz to 5.850 GHz Note: Country-specific restrictions apply.
5 GHz Max. Transmit Power	26 dBm
Surge Protection	Common mode: ±4 kV Differential mode: ±2 KV
Dimensions (W x D x H)	147 mm x 76 mm x 37 mm (5.79 in. x 2.99 in. x 1.46 in.) (without bracket)
Weight	0.35 kg
Number of Fixed LAN Ports	1
Max. LAN Port Rate	100 Mbps
Number of 10/100BASE-T Ports	1
Reset	Yes
Status LED	Yes
Power Supply	24 V passive PoE
Local Power Supply	Yes
PoE Out	No
Supported PoE Standards	No Note: Passive PoE input.
Antenna Type	Built-in directional antenna, horizontal: 60°, vertical: 30°
Hardware Button	1 x reset button
DC Power Connector Size	Inner Diameter: 2.10 ± 0.05 mm (0.08 ± 0.002 in.) Outer Diameter: 5.50 ± 0.05 mm (0.22 ± 0.002 in.) Depth: 9 mm (0.35 in.)
DC Voltage/Current	12 V/1 A
LEDs	1 x system LED 1 x port LEDs 3 x signal strength LEDs

Model	RG-EST310 V2
2.4 GHz Antenna Gain	No
5 GHz Antenna Gain	10 dBi
Power Consumption	＜7W
IP Rating	IP54
Color	Standard: Gray
Operating Temperature	Operating temperature: –30°C to +55°C (–22°F to +131°F)
Storage Temperature	Storage temperature: –40°C to +70°C (–40°F to +158°F)
Operating Humidity	Operating humidity: 5% to 95% RH (non-condensing)
Storage Humidity	Storage humidity: 5% to 95% RH (non-condensing)
MTBF	> 400000 hours
Working Distance	1 km
Bridging Performance	90 Mbps/100 meters (HT40) 80 Mbps/500 meters (HT40) 80 Mbps/1 km (HT40) 40 Mbps/2 km (HT40)
RSSI (dBm)	–52 dBm/100 m –65 dBm/500 m –68 dBm/1 km –75 dBm/2 km
Throughput & Camera Limits： 3 MP	16/100 m 16/500 m 16/1 km 6/2 km
Throughput & Camera Limits： 4 to 5 MP	10/100 m 10/500 m 10/1 km 4/2 km
Throughput & Camera Limits：	7/100 m 7/500 m

Model	RG-EST310 V2
6 to 7 MP	7/1 km 3/2 km
Throughput & Camera Limits： **7 to 8 MP**	5/100 m 5/500 m 5/1 km 2/2 km
Management Radio	5.150～5.350GHz，5.725～5.850GHz
Number of PtMP Links	5
ESD Protection	Tolerance:±8 kv Contact/ ±15 kv Air
Certification	CE
Software Features	
Operating Mode	Base Station/CPE
Channel Spacing	20 MHz
TDMA	Fixed Mode/Flexible Mode
WLAN Security	WPA2-PSK
Management SSID	@Ruijie-bxxxx
SSID Hiding	Yes
Spectrum Scan	Yes
Antenna Aligment	Yes
One-Touch Pairing	No
WMM	Yes
Storm Control	Yes
VLAN Packet Transmit	Yes
DHCP Server	Yes
DHCP Client	Yes

Model	RG-EST310 V2
Network Diagnostics	Ping/TraceRoute/Dns
Time & Date	Yes
Firmware Upgrade	Yes
Backup/Restore	Yes
Cloud Management	Yes
Power Configuration	Yes
Country/Region Code	Yes
Remote Restart	Yes
SON	Self-organizing Networking with Bridges
SNMP	Yes
Link Aggregation	No
Throughput & Camera Limits	Reference performance recommendation table
Ping	Yes
Traceroute	Yes
AI Heatmap	Yes

Package Contents

Model	RG-EST310 V2
Wireless Bridge/Antenna	2
PoE Injector	2
DC Power Adapter	0
Mounting Bracket	2
Gross Weight	0.35Kg
Package Dimensions (W x D x H)	147 mm x 76 mm x 37 mm (5.79 in. x 2.99 in. x 1.46 in.) (without bracket)

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