

# RG-EST310 V2



**5GHz Dual-stream  
802.11ac Wireless Bridge**

## Product Overview

Ruijie Reyee Series RG-EST310 V2 is an 802.11ac wireless bridge for video surveillance backhaul or remote wireless transmission in scenarios such as elevators, tower cranes, factories, campuses, and construction sites. Operating at 5GHz, RG-EST310 V2 supports two spatial streams (2x2 MIMO technology) and provides up to 867Mbps throughput, which can fully meet the data link bandwidth requirements of various services.

RG-EST310 V2 consists 2 devices, including the recorder-end and camera-end device. They are paired by default and can be deployed without requiring any configurations. When used for video surveillance backhaul, it is recommended to connect a switch or hard disk recorder to the recorder-end and connect a network camera to the camera-end.

RG-EST310 V2 can be managed via the app, including viewing the network topology and modifying configurations, which has completely revolutionized the conventional contact-type bridge configuration method. Bridge maintenance no longer requires working at heights, reducing the difficulty of maintaining bridges to an unprecedented level.

With the four-sided curved edges design, RG-EST310 V2 fully utilizes the compact size and offers an exquisite exterior design. Straps are provided for easy equipment installation. The casing of the device is optimized to deliver better dustproof and waterproof performance, providing IP65 protection. The weather-resistant materials enable the casing to stay robust for a long time under harsh conditions such as exposure to the sun, wind, acid and alkali corrosion. Moreover, the wide temperature range of the industrial materials adopted for the device fully guarantee the reliability and durability of the device under various complex environments such as hot and humid weather, dry and cold weather, sun exposure, rain, strong winds, etc. The device is capable of effectively withstanding the impact of bad weather or harsh environments, offering high stability while significantly reducing construction and installation difficulties.

The device is built-in with wireless product management software WSP-EST310. Users can view all wireless bridge information and the topology by logging in to any bridge device.

## Product Features

### Zero Configuration

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RG-EST310 V2 consists 2 devices, including the recorder-end and camera-end device. They are paired by default and can be used without requiring any configurations.

## Easy Installation

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Straps are provided for easy equipment installation to improve implementation efficiency.

## Convenient Maintenance

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RG-EST310 V2 can automatically adjust the channels and optimize the power based on the operating environment, thereby reducing the maintenance workload caused by environmental changes. The software and hardware self-healing design can effectively prevent system hang and unexpected connection loss.

RG-EST310 V2 supports app management, which revolutionizes the conventional contact-type bridge configuration mode. Bridge maintenance no longer requires working at heights, reducing the difficulty of maintaining bridges to an unprecedented level.

The device is built-in with wireless product management software WSP-EST310. Users can view all bridge information and the topology by logging in to any bridge device.

## High Reliability

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RG-EST310 V2 can provide dustproof and waterproof IP65 protection for outdoor environments and operate in a wide temperature range from  $-30^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . The high-quality weather-resistant materials enable RG-EST310 V2 to maintain excellent structural strength without embrittlement, yellowing, or deformation for long-term outdoor operation.

## Excellent Performance

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RG-EST310 V2 boasts high data transmission bandwidth, low latency, and load balancing, delivering excellent performance even when it is connected to multiple surveillance channels concurrently.

## Technical Specifications

Model	RG-EST310 V2 / RG-EST310
<b>Hardware specifications</b>	
RAM / Flash	64MB / 8MB
Radio	5GHz, dual-stream single-band 2×2
Operating Band	802.11a/n/ac: 5.725~5.850GHz
Antenna	Built-in directional antennas, 10dBi
Polarization	Horizontal: 60°, Vertical: 30°
Spatial Streams	2
Maximum Throughput	Up to 867Mbps at 5GHz
Max. Transmit Power	≤400mW (26dBm)
Dimensions	147mm(D)×76mm(W)×37mm(H) (Dimensions per device) (Same size for the transmitter and receiver, H: height of the device excluding the mounting kits)
Weight	0.35kg
Ports	1 10/100Base-T Ethernet port, supports 24VDC non-standard PoE 1 DC port, supports 12VDC power supply
Hardware Button	1 reset button
Status Indicators	System indicator: 1 Port indicator: 1 Bridge signal strength indicators: 3
Power Supply	Support 12VDC power supply and 24VDC non-standard PoE
Power Consumption	≤7W
Environment	Operating temperature: -30°C ~ 55°C (-22°F ~ 131°F) Storage temperature: -40°C~70°C (-40°F ~ 158°F) Operating humidity: 5%~95% (noncondensing) Storage humidity: 5%~95% (noncondensing)
Installation	Wall-mounted/ Pole-mounted (straps provided)
IP Rating	IP54
Lightning Protection	4KV
Radio Standard	SRRC certification
<b>Software Features</b>	
Automatic Bridging	Support The recorder-end and camera-end are automatically paired for bridging by default
Device Configuration and Management	Support App/Web configuration

Model	RG-EST310 V2 / RG-EST310
QR Code Login	Users can log in to the device configuration interface by scanning the QR code of the device using the app
Self-healing	Automatic restart upon equipment failure
Automatic Channel Adjustment	Automatically adjust the channel upon power-on

## Ordering Information

Model	Description
RG-EST310 V2	5GHz wireless bridge, including 2 devices for the recorder-end and camera-end, paired by default without requiring any configuration; up to 867Mbps throughput, built-in directional antenna, support Web/ Real-easy app management; 12VDC and 24VDC non-standard PoE; Wall-mounted/ Pole-mounted installation

## Camera Support Reference

Model	Distance (Meters)	RSSI (dBm)	Throughput (Mbps)	Port Speed (Mbps)	3MP H.265 (Units)	4-5MP H.265 (Units)	6-7MP H.265 (Units)
RG-EST310 V2 RG-EST310	100	-52	400	90	16	10	7
	500	-65	400	80	16	10	7
	1000	-68	240	80	16	10	7
	2000	-75	120	40	6	4	3



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