Ruijie | Reyee

RG-EST310 V2

5GHz Dual-stream 802.11ac Wireless Bridge

Redefine your easy network

Ruijie Networks

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 of 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

RG-EST310 V2 consists of 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

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

Convenient Maintenance

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

RG-EST310 V2 can provide dustproof and waterproof IP65 protection for outdoor environments and operate in a wide temperature range from –30°C to 50°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

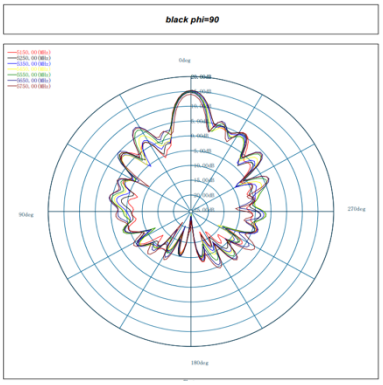
RG-EST310 V2 boasts high data transmission bandwidth, low latency, and load balancing, delivering excellent performance even when it is connected to multiple surveillance channels concurrently.

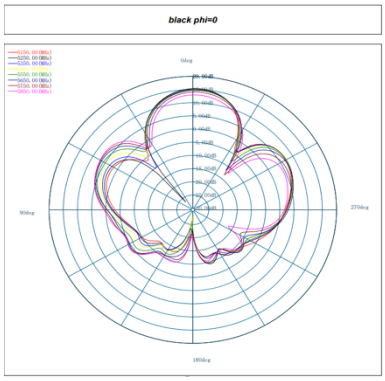
Technical Specifications

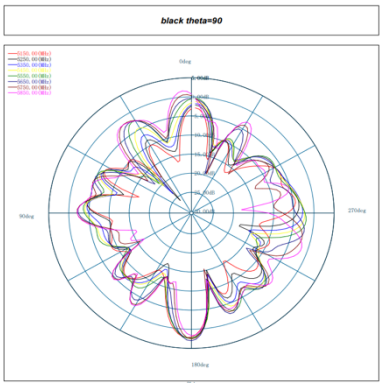
Model	RG-EST310 V2
Hardware Specifications	
Bridging Distance	1 km recommended
RAM/Flash	64 MB/8 MB
Operating Band	802.11a/n/ac: 5.150～5 .350GHz, 5.470~5.725GHz , 5.725～5 .850GHz (country specific)
Antenna	Directional antennas, 10 dBi
Spatial Streams	Two Spatial Streams, 2x2 MIMO
Throughput	5 GHz: 866 Mbps
Transmit Power	≤400 mw
Antenna Angle (Horizontal/Vertical)	60°/30°
Lightning Protection	Common Mode: ±4 KV, Differential Mode: ±2 KV
Dimensions (W x D x H)	147 mm*76 mm*37 mm (Without bracket)
Weight	0.35 kg
Service Port	One 10/100Mbps Ethernet port
Reset	Support
Status LED	Support
PoE	24 V Passive PoE
Local Power Supply	Support
External Power Supply	Not Support
Internal Antenna	Internal Antenna (basic gain: 10 dBi)
Working Power	<7 W
Color	Standard: Grey
Environment	Working Temperature: -30°C to 55°C Storage Temperature: -40°C to 70°C Working Humidity: 5% to 95% (non-condensing) Storage Humidity: 5% to 95% (non-condensing)
MTBF	>250000 H
Software Features	
Basic Settings	AP/CPE Switchover
	LAN Settings
	Hostname Settings
	Password Settings
	Country/Region Code Settings
	Time Zone Settings
	Clock Settings
Settings for All Devices	Password Settings
	IP Address Settings
	SSID Settings

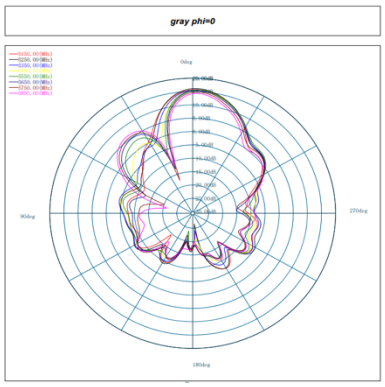
Model	RG-EST310 V2
Configuration Synchronization	Synchronizing configuration when the device is added.
	After users edit settings on eWeb, Ruijie Cloud will receive the timestamp reported by the device and trigger synchronization.
	A device goes online after settings are changed. The device will be synchronized with configuration based on its timestamp.
	Synchronizing configuration among Ruijie Cloud, eWeb and Ruijie Cloud App
Alarm	Alarm
WDS Settings	One-click optimization
	Switching among multiple working modes (high-bandwidth/normal/anti-interference)
	AP/CPE Switchover
	SSID, Channel and Power Settings
	Bridging Status LED
	Multi-VLAN Transparent Transmission
DNS	DNS client
SSH	SSH
	TFTP Client
	DHCP-Server
	DHCP Client
	Client
WIO (Ruijie Cloud)	Auto channel adjustment
DFS	Radar Signal Detection and Auto Frame Rate
WLAN Encryption and Security	Link Authentication
	Access Authentication
	Security (WAP-PSK/WAP2-PSK/WPA-WAP2-PSK)
	Key Agreement Protocol
WLAN QoS/WMM	WMM

Antenna Pattern Plot









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