

RG-EST310 V2

5GHz Dual-stream 802.11ac 1KM Wireless Bridge

DATASHEET



Highlights

- RG-EST310 V2 can easily transmit data from 1KM away in real time
- Automatic pairing at long distance, without complex alignment
- IP54 Weatherproof, -30°C~65°C guarantees stable operating in outdoor environments
- Support maximum 16 x 2MP cameras at 1KM
- Visually intuitive statistics monitoring on Ruijie cloud, easy remote maintenance

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

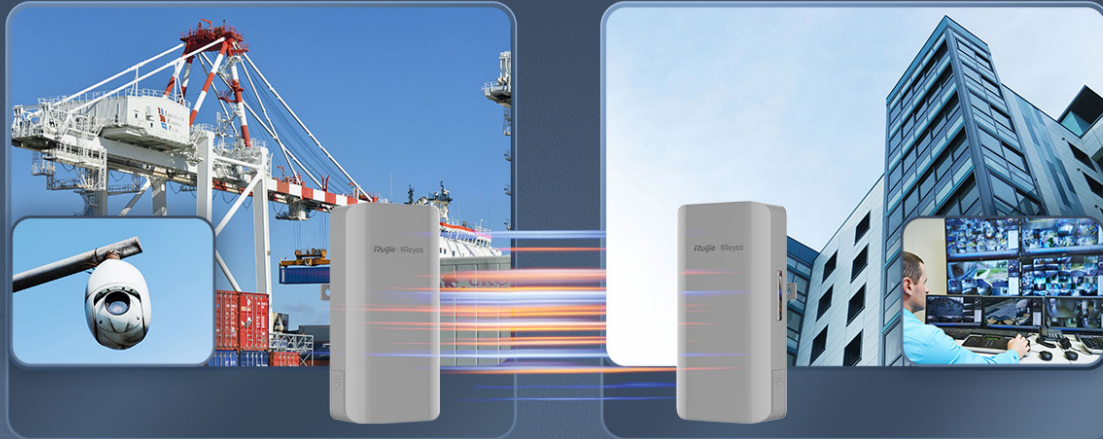
Wireless bridge for CCTV scenarios



867 Mbps **PTP/PTMP**

Highlight Features

Strong Adaptability and High Scalability



V0 Level
Flame Retardant



IP54
Weatherproof



-30 to 55 C Operating
Temperature

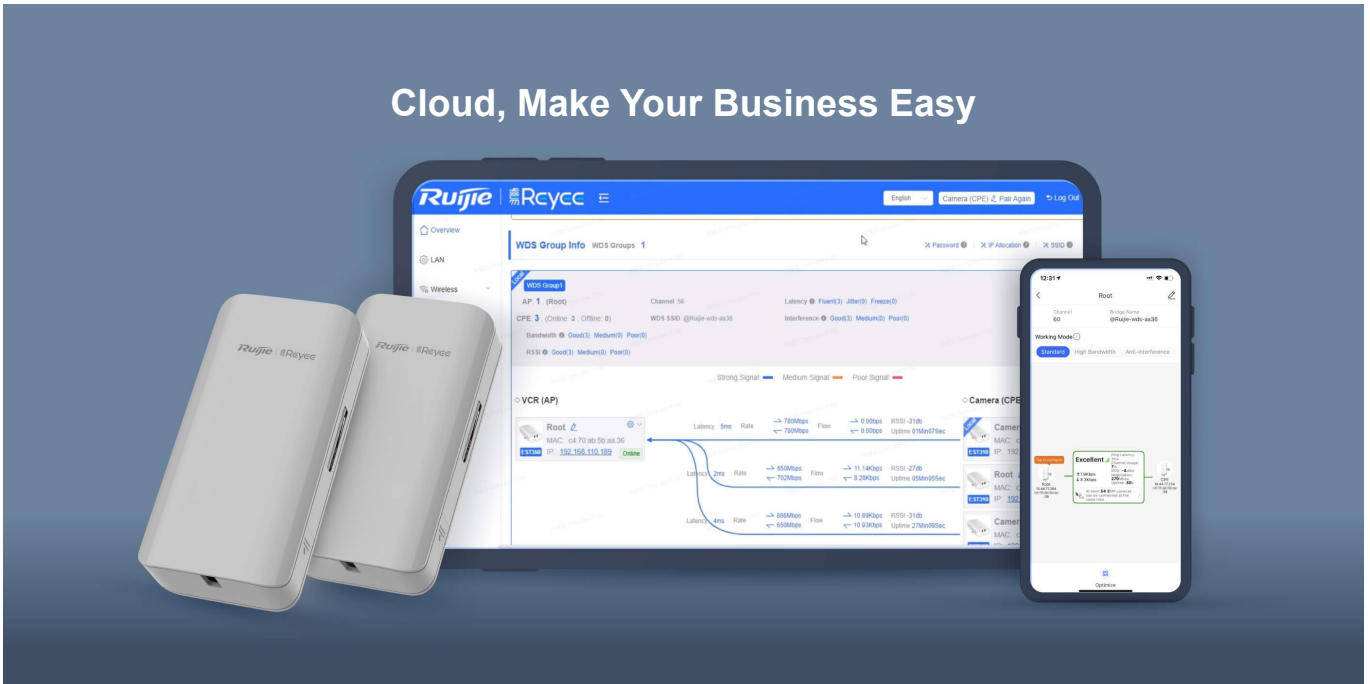
High Quality High Performance

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

Basic

| | |
|------------------------|--|
| Radio Design | 5 GHz Single-Band Dual-Stream |
| Transmission Protocol | IEEE 802.11 ac/n/a |
| 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 |
| Polarization | Horizontal: 60°, Vertical: 30° |
| Bridging Distance | 3 KM (recommended) |
| Spatial Streams | 2x2, MU-MIMO |
| Memory/Flash | 64 MB/8 MB |
| Maximum Throughput | Up to 867 Mbps at 5 GHz |
| Ports | 1 10/100Base-T Ethernet ports, port 1 with Passive PoE |
| Max. Transmit Power | ≤400 mW(26 dBm) (adjustable) |
| IP Rating | IP54 |
| Lightning Protection | 4 KV |
| Installation | Wall-mounted/ Pole-mounted |
| Weight | 0.35 kg |
| Dimensions (D x W x H) | 147 mm × 76 mm × 37 mm |

Software Features

| IPv4 | |
|-------------------------------------|------|
| 802.1Q VLAN | ✓ |
| Multi-VLAN Transparent Transmission | ✓ |
| ARP | 256 |
| Max. Concurrent Connections | 8000 |
| Ping | ✓ |

Specifications

Software Features

IPv4

Traceroute ✓

Unicast traffic ✓

DHCP Client ✓

DNS Client ✓

Static IP address ✓

IP Collision Avoidance ✓

Management IP 192.168.120.1

Routing

Default Route ✓

Wireless

SSID/SSID Hiding ✓

Password Open / WPA-PSK / WPA2-PSK / WPA/WPA2-PSK

RSSI -52/100M
-65/500M
-68/1KM
-75/2KM

Performance 90Mbps/100M(HT40)
80Mbps/500M(HT40)
80Mbps/1KM(HT40)
40Mbps/2KM(HT40)

One-Click Optimization ✓

DFS ✓

Local Forwarding ✓

WLAN QoS WMM

Management

Zero Provisioning on Cloud QR-Code / Serial Number

CWMP(TR069) Support ✓

Specifications

Software Features

Management

| | |
|-------------------------|---|
| Point-to-Point | ✓ |
| Point-to-Multipoint | Recommended 5 |
| Self-Organizing Network | Max. 200 wireless bridges |
| AP/CPE Switchover | ✓ |
| Interface Configuration | ✓ |
| Country Code | 176 countries support, details refer to Country&Region Code reference |
| Clock setting | ✓ |
| Time Zone | ✓ |

Maintanance

| | |
|-------------|--------------------------------------|
| Alarm | IP address conflict / SSID / Offline |
| Diagnostics | ✓ |
| Reboot | ✓ |
| Reset | ✓ |

Cloud Features

| | |
|-----------------------|---|
| Remote Access | ✓ |
| Remote Reboot | ✓ |
| Statistics Monitoring | ✓ |
| Working mode | Normal / High performance / Anti-interference |
| Remote SSH | ✓ |
| Remote EWeb | ✓ |

Camera Reference

| | |
|----------------------|---|
| 3Mbps Video Bit Rate | 16 Units/100M 16 Units/500M 16 Units/1KM 6 Units/2KM |
|----------------------|---|

Specifications

Software Features

Camera Reference

| | |
|------------------------|---------------|
| 4-5Mbps Video Bit Rate | 10 Units/100M |
| | 10 Units/500M |
| | 10 Units/1KM |
| | 4 Units/2KM |

| | |
|----------------------|--------------|
| 6Mbps Video Bit Rate | 7 Units/100M |
| | 7 Units/500M |
| | 7 Units/1KM |
| | 3 Units/2KM |

Hardware Features

Physical Features

| | |
|---------------|--|
| LED indicator | LEDs indicate the bridging quality: LED off: No bridging LED blinking: $\leq -78\text{dBm}$ One LED on: $-78\text{dBm} < \text{RSSI} \leq -72\text{dBm}$ Two LEDs on: $-72\text{dBm} < \text{RSSI} \leq -65\text{dBm}$ Three LEDs on: $> -65\text{dBm}$ |
|---------------|--|

| | |
|-----------------|----------------|
| Hardware Button | 1 reset button |
|-----------------|----------------|

| | |
|--------------|---|
| Power Supply | 12 VDC power supply or 24 VDC Passive PoE |
|--------------|---|

| | |
|-------------------|---------------|
| Power Consumption | $< 7\text{W}$ |
|-------------------|---------------|

| | |
|-------------|--|
| Environment | Operating temperature: -30°C to 55°C (-22°F ~ 131°F) Storage temperature: -40°C to 70°C (-40°F ~ 158°F) Operating humidity: 5% to 95% (noncondensing) Storage humidity: 5% to 95% (noncondensing) |
|-------------|--|

| | |
|------|---------------------|
| MTBF | $> 400,000\text{H}$ |
|------|---------------------|

Package Contents

| | |
|-------------------------------|--------------------------|
| Device | RG-EST310 V2 * 2 |
| Mounting Bracket | 2 |
| Hose Clamps | 4 |
| Power supply | Power adapter * 2 |
| User Manual | 1 |
| Wall Anchors | 4 |
| Phillips Pan Head Screws | 8 |
| Package Weight | 1.35 kg |
| Package Dimension (w x d x h) | 400*231*88mm |

Ruijie | Rcycc

 **Redefine your easy network**

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