

RG-EST100-E

2.4 GHz Dual-Stream 500 m Wireless Bridge

DATASHEET

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Highlights

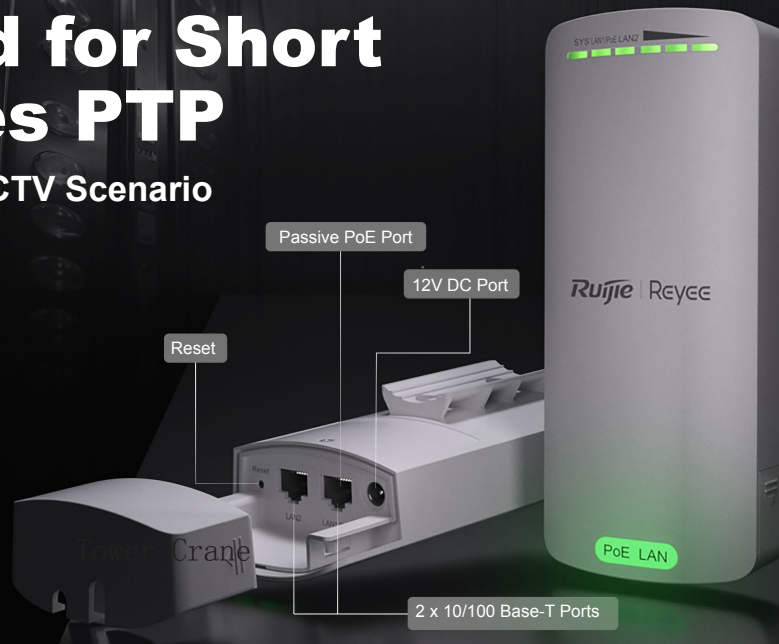
- RG-EST100-E can easily transmit data from 500 m away in real time
- Factory-free configuration, without complex alignment
- IP55 Weatherproof, -30°C~60°C guarantee stable operating at outdoor environment or elevator environment
- Support maximum 10 x 3 MP cameras loading at 100 m, 5 x 3 MP cameras loading at 500 m
- Visually Intuitive statistics monitoring on Ruijie cloud, easy remote maintenance

Designed for Short Distances PTP

Unique Value for CCTV Scenario

RG-EST100-E

Performance Scenarios



Designed for Short Distances PTP

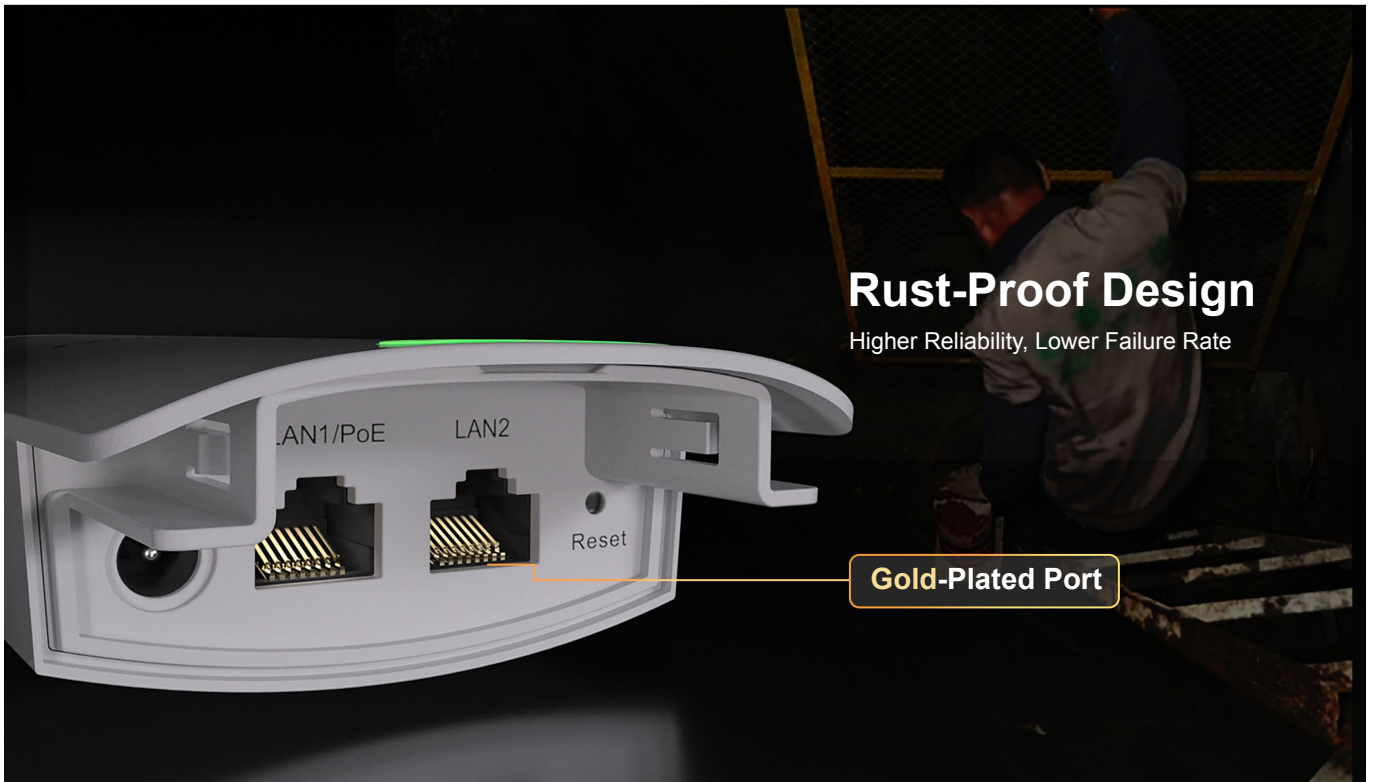
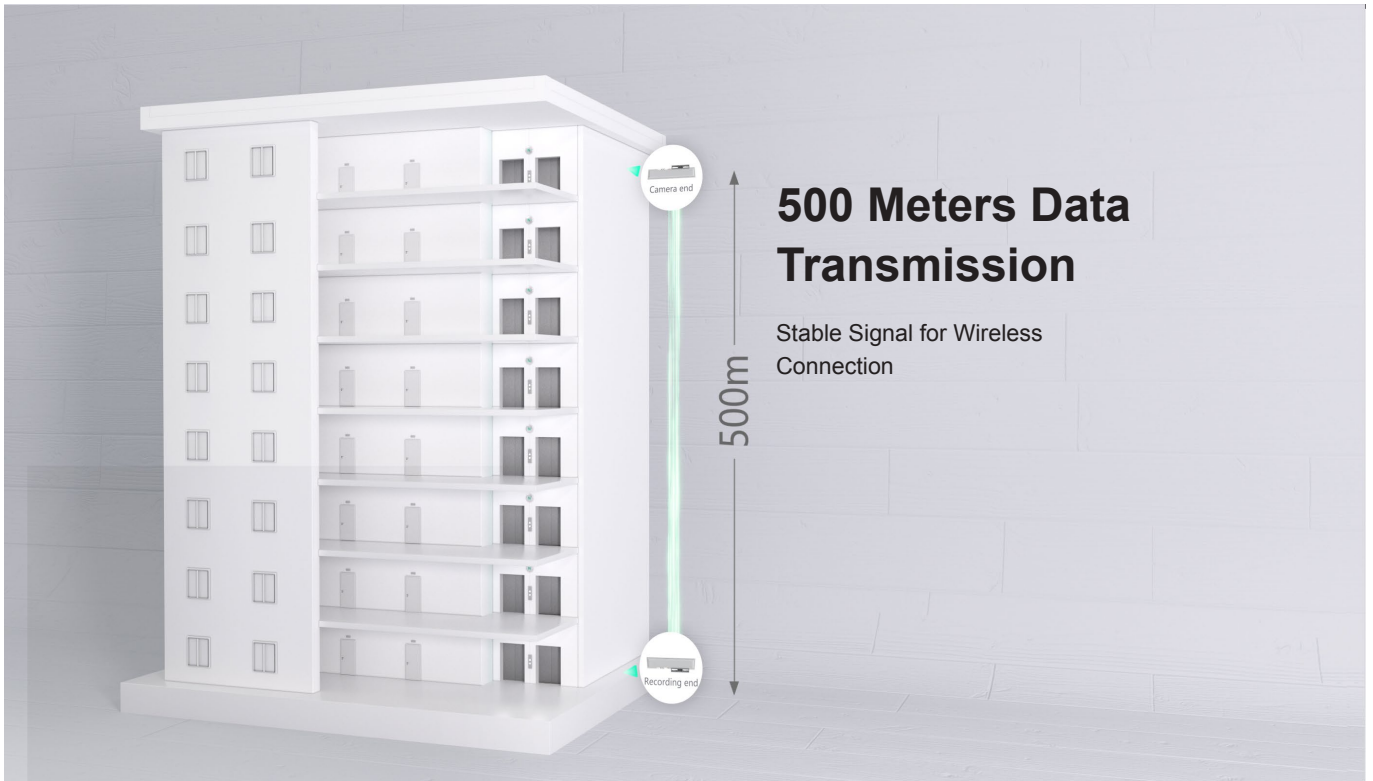
Unique Value for CCTV Scenario

RG-EST100-E

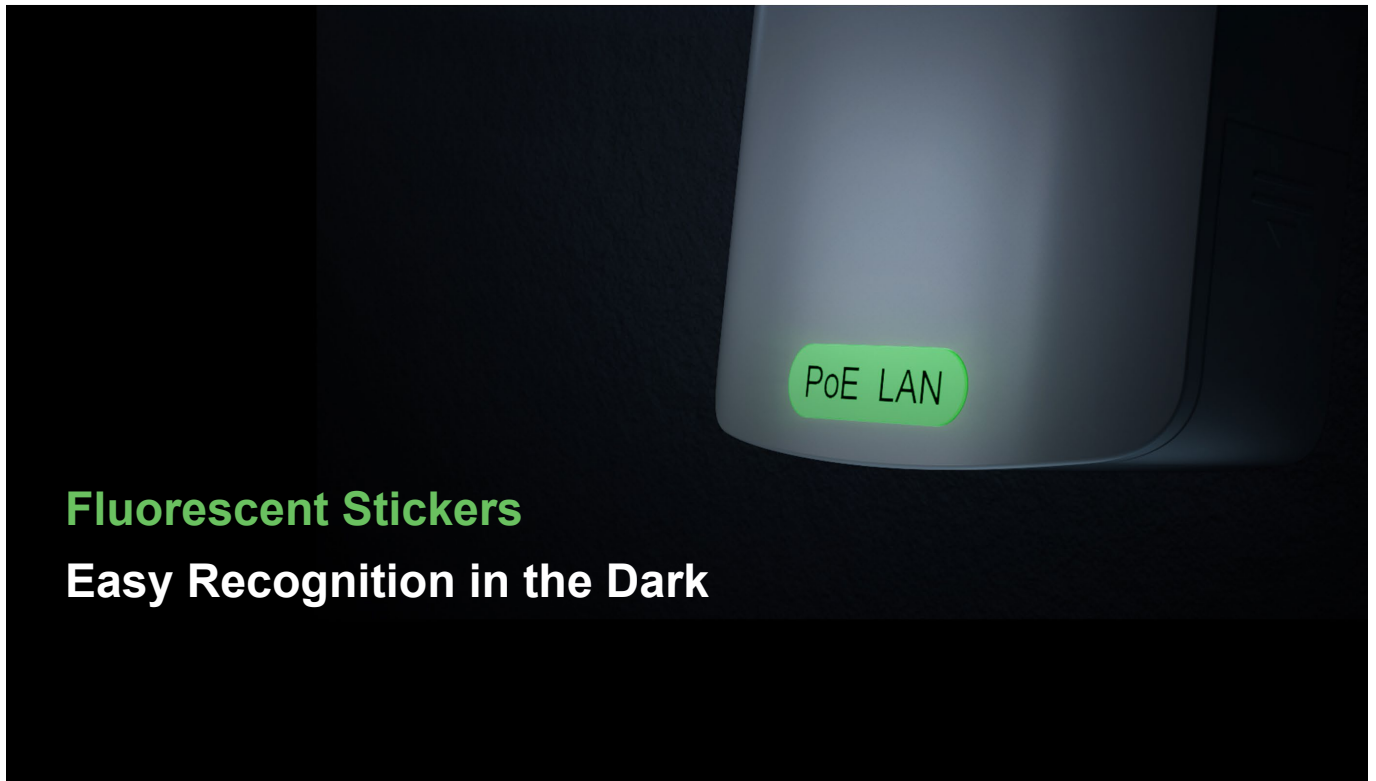
Performance Scenarios



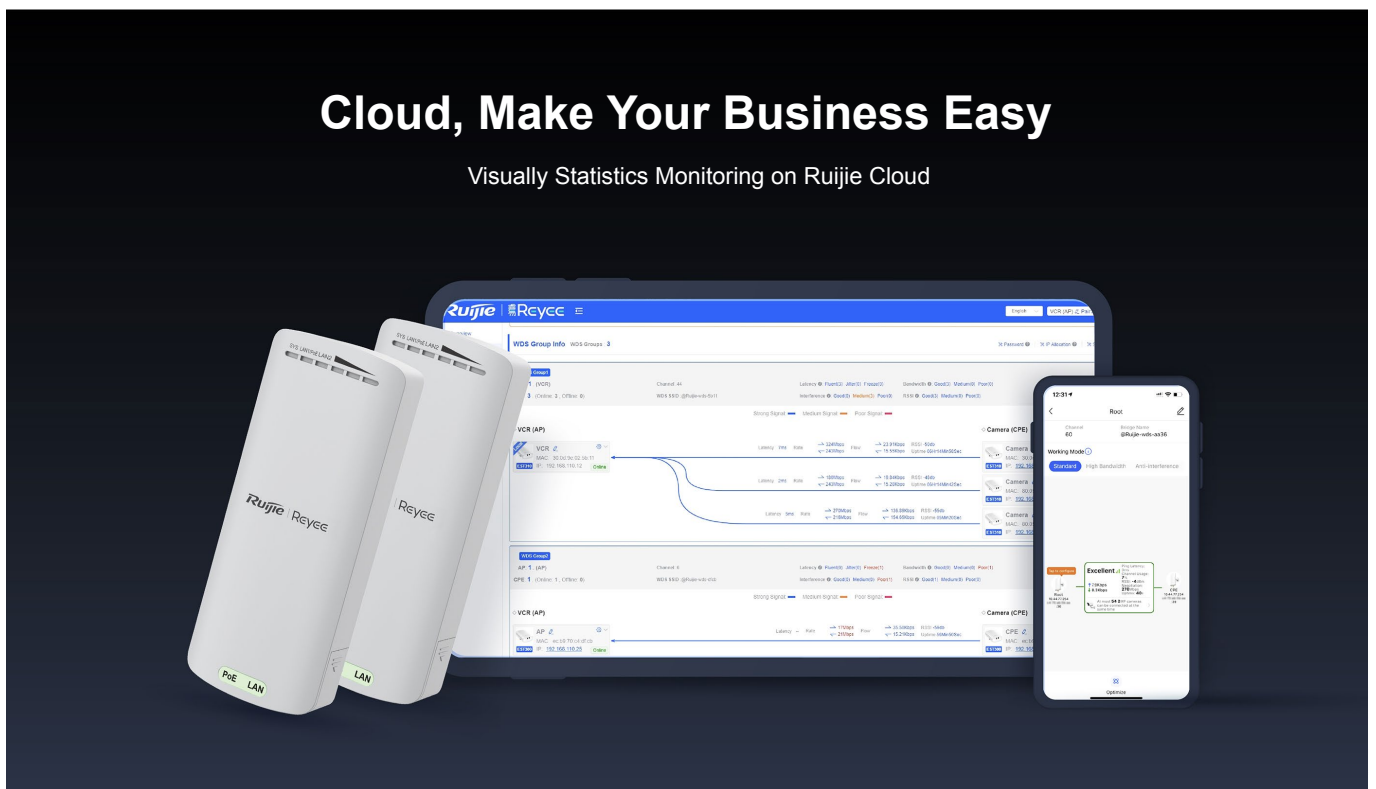
Highlight Features



Highlight Features



Fluorescent Stickers
Easy Recognition in the Dark



Cloud, Make Your Business Easy

Visually Statistics Monitoring on Ruijie Cloud

Specifications

Model	RG-EST100-E
Hardware Features	
Radio Design	2.4 GHz single-band dual-stream
2.4 GHz Band	Yes
5 GHz Band	No
Protocol and Standard	802.11b/g/n
Wi-Fi 4/5/6/7	Wi-Fi 4
Spatial Streams	Two spatial streams, 2x2, MIMO
2.4G Channel Width	Auto/20/40 MHz
Receiver Sensitivity	11b: -91 dBm (1 Mbps), -88 dBm (5 Mbps), -85 dBm (11 Mbps) 11a/g: -89 dBm (6 Mbps), -80 dBm (24 Mbps), -76 dBm (36 Mbps), -71 dBm (54 Mbps) 11n: -83 dBm@MCS0, -65 dBm@MCS7, -83 dBm@MCS8, -65 dBm@MCS15
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)	MCS0(BPSK)to MCS15 (64QAM)
Wi-Fi Protocols (2.4 GHz)	Wi-Fi 4 (IEEE 802.11b/g/n)
Wireless Data Rate	300 Mbps
Wireless Data Rate (2.4 GHz)	300 Mbps
Frequency Bands	802.11b/g/n: 2.4 GHz to 2.483 GHz Note: Country-specific restrictions apply.
2.4 GHz Max. Transmit Power	20 dBm
Surge Protection	Common mode: ±4 kV Differential mode: ±2 KV

Model	RG-EST100-E
Dimensions (W x D x H)	165.5 mm x 68.7 mm x 42 mm (6.51 in. x 2.70 in. x 1.65 in.)
Weight	0.3 kg
Number of Fixed LAN Ports	2
Max. LAN Port Rate	100 Mbps
Number of 10/100BASE-T Ports	2
Reset	Yes
Status LED	Yes
Power Supply	12 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: 70°, vertical: 70°
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 2 x port LEDs 3 x signal strength LEDs
2.4 GHz Antenna Gain	6 dBi
5 GHz Antenna Gain	No
Power Consumption	<5W
IP Rating	IP55
Color	Standard: Elegant white
Operating Temperature	Operating temperature: -30°C to +60°C (-22°F to +140°F)

Model	RG-EST100-E
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	0.5 km
Bridging Performance	60 Mbps/100 meters (HT20) 30 Mbps/500 meters (HT20)
RSSI (dBm)	-58 dBm/100 m -68 dBm/500 m
Throughput & Camera Limits: 3 MP	10/100 m 5/500 m
Throughput & Camera Limits: 4 to 5 MP	6/100 m 3/500 m
Throughput & Camera Limits: 6 to 7 MP	3/100 m 1/500 m
Throughput & Camera Limits: 7 to 8 MP	3/100 m 1/500 m
Management Radio	2.412G~2.472GHz
Number of PtMP Links	1
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

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SSID Hiding	Yes
Spectrum Scan	Yes
Antenna Alignment	Yes
One-Touch Pairing	No
WMM	Yes
Storm Control	Yes
VLAN Packet Transmit	Yes
DHCP Server	Yes
DHCP Client	Yes
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	No

Package Contents

Model	RG-EST100-E
Wireless Bridge/Antenna	2
PoE Injector	0
DC Power Adapter	2
Mounting Bracket	0
Gross Weight	0.3Kg
Package Dimensions (W x D x H)	165.5x 68.7 mm x 42 mm (6.51 in. x 2.70 in. x 1.65 in.)

Ruijie | ReYCE

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