



# RG-EG105GW

## ENTERPRISE GIGABIT WIRELESS ROUTER

## Product Overview

Ruijie Real-Easy Series RG-EG105GW is a high-performance enterprise-grade wireless router designed for small enterprise offices, small and medium-sized stores, food and beverage industry, etc. The brushed aluminum top cover of the metal casing not only provides exquisite texture, but also shields the external interference, thereby improving the quality of signal transmission and the stability of the device.

RG-EG105GW provides 4 10/100/1000M LAN ports (including 1 LAN/WAN port) and 1 fixed WAN port, which supports up to 2 concurrent broadband access with 500Mbps recommended bandwidth. The maximum clients supported per router is 100 and the recommended number of wireless terminals is 60.

With concurrent 2.4G and 5G, RG-EG105GW supports up to 450Mbps at 2.4G and up to 867Mbps at 5G. Equipped with 802.11ac Wave2 RF chip, RG-EG105GW supports MU-MIMO. For multi-user access, the wireless speed is more stable, which further improves the users' Internet experience.

RG-EG105GW supports policy-based routing of multiple WAN ports, and offers various online authentication methods including WeChat authentication, SMS authentication, and one-click authentication by integrating with the MACC cloud platform. RG-EG105GW can perform per-port VLAN configuration to achieve port isolation and integrate with smart flow control to achieve comprehensive network planning. RG-EG105GW supports rich scenario-based application configurations, and guarantees the priority for the network experience of the employees' office, cashier system and ordering system of the restaurants, so as to meet the application needs of small enterprises, small and medium-sized shops, restaurants, etc.

The built-in network controller of RG-EG105GW can centrally manage up to 32 Ruijie Real-easy Series EAPs and RAPs which support smart networking feature and up to 128 Ruijie Real-easy Series ES2xx smart switches, realizing the industry-leading auto-discovery and auto-networking features for gateways, switches and wireless. The device also supports AP mode. In both routing mode and AP mode, it can achieve seamless roaming with other AP wireless signals in the same layer 2 networking environment.

With the unified management of RG-EG105GW, the entire network can be centrally configured through the mobile app and MACC cloud platform for remote management and fault diagnosis. It also supports daily configuration tasks via WeChat to truly achieve multi-end management on the mobile terminal and PC anytime, anywhere.

## Product Features

### Performance

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#### Multiple WAN Ports

RG-EG105GW offers 4 10/100/1000M LAN ports (including 1 LAN/WAN port) and 1 fixed WAN port. Users can flexibly switch between 1 WAN port + 4 LAN ports or 2 WAN ports + 3 LAN ports.

### Large Bandwidth

When flow control is disabled, the recommended downlink bandwidth is 500M, which can meet the requirements of most application scenarios.

Equipped with Qualcomm chip, the device supports concurrent dual-band 2.4GHz and 5GHz. It offers up to 450Mbps at 2.4GHz, up to 867Mbps at 5GHz and up to 1317Mbps per router.

### High Concurrency

The maximum number of clients supported is 100. The 802.11ac Wave2 MU-MIMO feature improves the network experience of multiple concurrent wireless users, thereby increasing the maximum wireless capacity to 100. The recommended number of clients is 64, which is sufficient for most scenarios including smart homes, stores, and offices with wired / wireless terminals and smart appliances.

### Strong Signal

RG-EG105GW adopts high-power PA and high-sensitivity LNA, greatly improving the wireless coverage. Users can get full wireless signals at any location in the room and enjoy high-quality and fast Wi-Fi for any services such as voice call, video call and web browsing.

### System Hang Prevention

The built-in watchdog timer automatically restarts the device when fault occurs to guarantee user experience.

## Features

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### Fast Roaming

The device not only delivers the outstanding wireless features of Ruijie Real-easy AP Series, but also realizes fast roaming with Ruijie Real-easy APs or other RG-EG105GW routers. It also supports switching to AP mode for signal supplementation, so as to prevent service disconnection when the users are moving from one place to another, ensuring the user experience.

### Port Isolation

RG-EG105GW supports per-port VLAN and network segment division, and provides a cascade port for surveillance switch expansion, isolating the surveillance network and data network.

### Service Assurance

According to the access bandwidth and the number of users, the bandwidth guarantee policy intelligently adjusts the terminal bandwidth to ensure that each user can enjoy a better network experience. The key service protection ensures that the key services will not be affected by other services, offering fast experience.

### Multiple WAN Policies

RG-EG105GW supports PPPoE, static IP, dynamic IP, and other WAN port connection modes, as well as smart routing based on the carrier address database, and policy-based routing for load balancing and active/standby switching. It also supports load balancing based on source addresses so that services such as online banking login will no longer fail due to IP changes.

### **Authentication Policies**

RG-EG105GW supports multiple authentication methods such as WeChat authentication, SMS authentication, and one-click authentication to ensure secure and reliable Internet access, thus realizing the authentication requirements in commercial scenarios.

### **Single-cable IPTV**

Integrating with EAP1xx / RAP1200 series wall plate AP, it supports single-cable transmission for both Internet data and IPTV data from the modem. The data is separated at the wall plate AP, and then sent to the IPTV set-top box and used to provide the Internet Wi-Fi respectively.

### **Copying the Dial-up Password**

By obtaining the dial-up account password from the existing router, users do not have to worry about forgetting the password when replacing the router.

### **Device Status Monitoring**

RG-EG105GW supports checking of terminal information, Internet traffic, etc.

### **VPN**

RG-EG105GW supports VPN server and client features such as IPsec.

## **Network Maintenance**

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### **One-click Networking in 3 Minutes Using the App**

RG-EG105GW can automatically discover the devices of the entire network, and easily complete the configurations via the one-click configuration of the mobile app without any technical threshold.

### **Unified Network Controller**

When the device is used as an egress gateway, it can also serve as a unified controller for the entire network. The industry-leading unified network controller for gateway + switch + wireless can manage up to 32 EAPs, RAPs or managed switches which support smart networking feature and up to 128 ES2xx Series smart switches.

### **Wi-Fi Control**

Individual SSID management: Support 8 Chinese or English SSIDs. The frequency band, encryption mode, VLAN and address segment can be configured individually based on the SSID.

Wireless experience optimization: In strong interference environment, the wireless competitive mode can be applied to increase channel occupancy and improve network experience. 5G priority is supported to access 5G networks at higher priority for higher speed and less interference.

Wireless security: Support viewing of wireless user information, as well as blacklist and whitelist access control for wireless terminals.

Health mode: The Wi-Fi power can be reduced based on the time session, so that the radiation is smaller, and the power consumption is lower.

### Multiple Management Methods

Local/ remote management and configuration of the entire network for all EG + EAP/RAP which support smart networking feature can be performed using the mobile app or MACC cloud platform so that fault can be discovered and handled in time. With the mobile app, it also supports features such as QR code authentication for Wi-Fi, terminal status checking, Wi-Fi setting, parental control, and device restart.

### Network Planning

The rich network planning features can isolate the network for different services, and plan the bandwidth according to the network segment, terminal, etc., to ensure the network quality of key equipment and core services and avoid IP address conflicts.

### Network Diagnosis

RG-EG105GW supports diagnosis and repair suggestions for more than 30 common network anomalies including DHCP conflicts, abnormal negotiation rates, excessive traffic, AP disconnection and device interference.

\* Note: For device models and versions that support the smart networking feature, please consult Ruijie customer service or the distributors.

## Technical Specifications

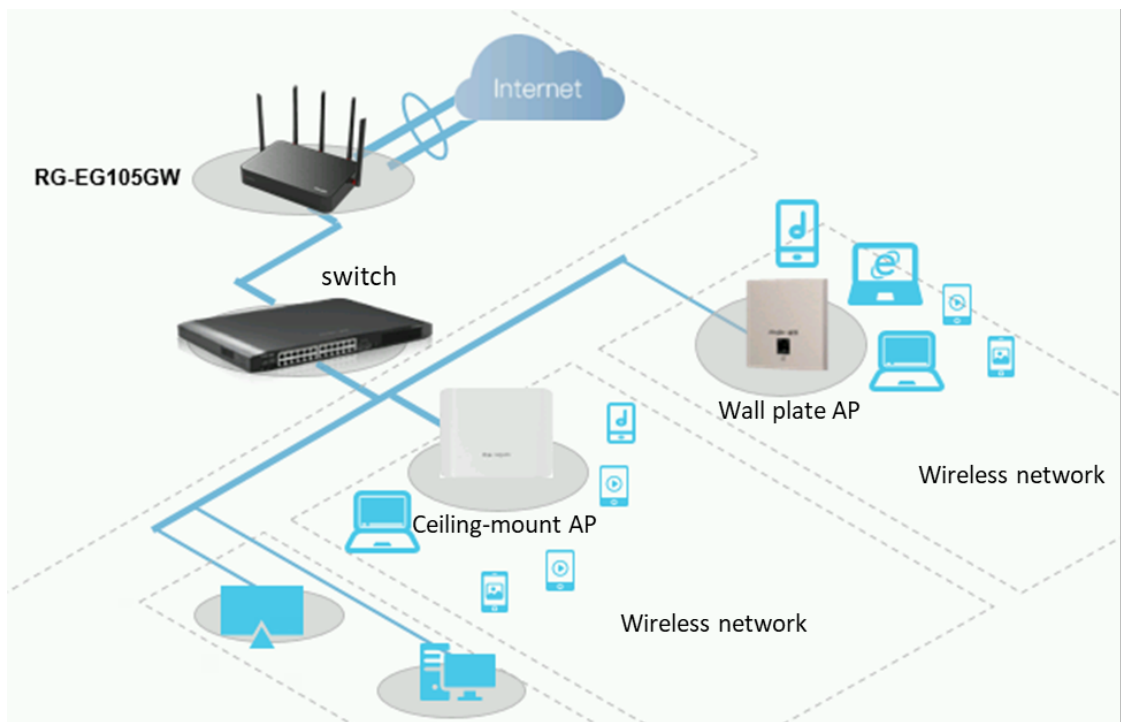
Model	RG-EG105GW
Basic specifications	
Fixed ports	5 10/100/1000Base-T ports, supporting up to 2 WAN ports (Default: 1 WAN port, 4 LAN ports; LAN3 can be switched to WAN1 port) 1 USB2.0 port
RAM	128MB
Flash	16MB
Antenna	3 2.4G blade antennas (maximum gain 5dBi) 2 5.8G blade antennas (maximum gain 5dBi)
Protocol	Concurrent 802.11a/n/ac/ac Wave2 and 802.11b/g/n
Operating bands	2.4G:2.4G ~ 2.483GHz, 5G: 5.150-5.350GHz, 5.725-5.850 GHz
Spatial streams	5 spatial streams per router 3 spatial streams at 2.4GHz 2 spatial streams at 5GHz
Maximum clients	Supports up to 100 concurrent clients Recommended number of wireless terminals: 60
Recommended bandwidth	500M asymmetric bandwidth (flow control disabled) 300M asymmetric bandwidth (flow control enabled)

Model	RG-EG105GW
Local power supply	Support 220V AC local power supply
Power consumption	<20W
Basic network features	
Network access	PPPoE dial-up, DHCP client, static IP, automatic identification of access methods, automatic avoidance of WAN port address conflicts, MAC cloning, obtaining account passwords from existing routers
Routing	Static routing, policy-based routing, carrier address routing, active/standby mode, load balancing based on source address, flow-based load balancing, port-based weighted load balancing of data streams
Security	ACL, IP-MAC binding, MAC address filtering, dynamic ARP, static ARP binding, NAT, NAPT, port mapping
Other protocols	DHCP Server, DHCP Client, DHCP Option43 / 138, DNS Client, DNS Server, DNS Proxy, TFTP, NTP, DDNS
Gateway	
Flow control	Support custom flow control policies, IP-based automatic bandwidth assignment
Traffic audit	Real-time traffic audit, IP traffic visualization
VPN	IPsec VPN (8 tunnels) server and client
Authentication	Marketing authentication: WeChat authentication (through external server), wifidog (SMS authentication, one-click authentication)
Wireless management	
Management capacity	In gateway mode, the maximum management capacity is 32
AP management	Support multi-SSID configuration, SSID hiding, channel setting, power setting, AP wired port setting, AP online upgrade, STA quantity setting, STA blacklist and whitelist
Roaming	Support local forwarding roaming, Layer 2 roaming, Layer 3 roaming between APs, viewing of STA roaming track
Switch management	
Management capacity	Maximum manageable switches for ES2 series: 128
Port management	Loop protection, port mirroring, port isolation, port configuration, PoE configuration, port limit, storm control, static MAC, MAC search
Status display	Port statistics, monitoring information, cable detection, VLAN configuration, MAC list
Device management	Per-device upgrade, batch upgrade
Special features	
Featured solutions	Single-cable IPTV solution, port service VLAN and network segment isolation solution, smart fault diagnosis solution, intranet penetration solution, auto-networking solution, wired relay solution (AP mode)
Flexible management	Mobile app management, WeChat management, MACC cloud platform management, local management, DDNS-free remote web management, multi-user collaboration management

Model	RG-EG105GW
Physical specifications	
Dimensions	250×170×42 (mm)
Weight	1.2kg
Temperature	Operating temperature: -10°C~40°C Storage temperature: -40°C~70°C
Humidity	Operating humidity: 5%~95% (non-condensing) Storage humidity: 5%~95% (non-condensing)

## Typical Applications

RG-EG105GW is designed for wireless networks (less than 100 terminals) of small enterprise offices, small lodging establishments, long-term rental apartments, rental houses, small and medium-sized stores, food and beverage industry, etc., which can be deployed with EAP / RAP that support smart networking feature for auto-networking, providing stable wireless experience.



## Ordering Information

Model	Description
RG-EG105GW	Dual-band enterprise-grade wireless router with metal casing, 5 1000Base-T ports (dual WAN ports), 500M (asymmetric) recommended downlink bandwidth, support up to 100 clients, up to 1317Mbps wireless access rate, 802.11ac Wave2, support mobile app networking feature and roaming with Real-easy Series APs





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