



# RG-ES200 Series

## L2 Smart Cloud Switches

### Datasheet

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RG-ES205GC-P



RG-ES206GC-P



RG-ES209GC-P



RG-ES210GC-LP



RG-ES218GC-P



RG-ES226GC-P



RG-ES205GC



RG-ES208GC



RG-ES216GC



RG-ES224GC

# 1 Product Overview

With the growing video surveillance industry in the world, there are various surveillance equipment manufacturers and brands offering products of different qualities, which has increased the probability of surveillance network malfunction. At present, the technical threshold of most of the engineering companies engaged in surveillance projects is relatively low. When encountering surveillance network failure, they are unable to locate the problem quickly, causing high workload to the operation and maintenance staff. Therefore, to solve the pain points of the current video surveillance industry, Ruijie Real-easy Series has launched a series of smart surveillance switches. In addition to the Ruijie Real-easy smart surveillance PoE switches, the series offers 5-port RG-ES205GC, 8-port RG-ES208GC, 16-port RG-ES216GC and 24-port RG-ES224GC non-PoE Gigabit switch to meet the customers' needs for smart management in non-PoE circumstances, such as PC, printer, and non-PoE cameras.

Ruijie Real-easy Series smart surveillance switches offer a variety of port options to meet the needs of video surveillance networks of different scales. RG-ES205GC-P, RG-ES209GC-P, RG-ES218GC-P and RG-ES226GC-P support full-power PoE output to ensure that all cameras can be powered simultaneously when connected to the switch at maximum capacity. In addition, Ruijie Real-easy Series smart surveillance switches provide simple and easy-to-use management features while offering plug and play with default factory configuration, which can quickly locate the surveillance network faults, initiate port restart, perform VLAN configuration, etc. Mobile app and MACC remote management is also supported, making the operation and maintenance of the surveillance network easier and more convenient, while reducing operation and maintenance costs.

To solve the pain points of the current video surveillance industry, Ruijie Reyee Series has launched a series of smart surveillance switches. In addition to the Ruijie Reyee smart surveillance PoE switches, the series offers a 4+2 ports RG-ES206GC-P and an 8+2 ports RG-ES210GC-LP PoE Gigabit switch to meet the customers' needs for smart management.

## 2 Product Features

### **Plug and Play with zero configuration**

Under factory default state, the smart surveillance switches require zero configuration after plugged in. The video surveillance network can be set up quickly after connecting the switch to the cameras and DVR correctly.

### **Supporting PoE cameras at maximum capacity**

Support powering PoE network cameras for all PoE ports simultaneously. Whether it is day or night, the infrared light of the camera is on or off, it can ensure that all PoE network cameras are powered.

### **Auto PoE power adjustment for safety and energy saving**

The PoE port of the smart surveillance switches support 802.3af and 802.3at, providing up to 30W power supply to the connected device. The switches will negotiate with the connected devices to automatically adjust the PoE power, thereby saving energy.

In addition, when the PoE port is connected to a PC, DVR, or other non-PoE device, the switch will automatically identify the device and will not output power to such device to ensure equipment safety.

### **High compatibility for network cable**

The smart surveillance switches not only support standard cat5/5e/6 network cables, but also support power supply and data transmission via network cables of non-standard materials (such as 0.38/0.40/0.45-diameter copper-clad steel/iron), facilitating the construction and cabling.

### **High surge protection for device stability**

The ports of the smart surveillance switches offer surge protection of up to 6KV, reducing the probability of being damaged by the surge and improving the stability of the customer's network.

### **Fast fault positioning**

The smart surveillance switches support network topology display of the entire network and monitoring the network status in real time. When failure occurs for the network camera, the location and cause of failure can be displayed in a timely manner, and the notification can be sent via the mobile app.

### **On-demand VLAN configuration**



In the network of villas/ stores/ offices, the network cameras and wireless APs may be connected to the same switch. Without network isolation, there may be problems such as camera screen lag and slow wireless speed.

The smart surveillance switches provide convenient and flexible VLAN division, which can automatically divide different VLANs according to the type of equipment connected to the port, so that the surveillance network and data network do not interfere with each other, improving the stability of the entire network.

### **Mobile app/ MACC cloud platform remote management**

The smart surveillance switches not only support web interface management, but also support mobile app and MACC cloud platform remote management. Users can view the network status, modify the configuration, and troubleshoot at home. In addition, the PoE port can be restarted remotely to restart the faulty PoE camera.

### **Multiple deployment methods allowing one-step project management**

The smart surveillance switches can obtain the IP address automatically from the gateway and connect to the external network without configuration. MANET for switches is also supported. Users can scan the serial number of any switch in the network using the mobile app to automatically add all switches in the network to the project.

In addition, the smart surveillance switches support networking with Real-easy Series EG / EAP. The switches can be automatically discovered by the Real-easy Series EG / EAP and added to the corresponding project.

## 3 Technical Specifications

Model	RG-ES205GC-P	RG-ES206GC-P	RG-ES209GC-P
<b>Specifications</b>			
<b>Switching capacity</b>	10Gbps	12Gbps	18Gbps
<b>Switching Cache</b>	1Mbit	1Mbit	1.5Mbit
<b>Package forwarding rate</b>	7.44Mpps	8.9Mpps	13.392Mpps
<b>Ports</b>	4 10/100/1000 Base-T ports (PoE/PoE+) 1 10/100/1000 Base-T uplink port	4 10/100/1000 Base-T ports (PoE/PoE+) 2 10/100/1000 Base-T uplink port	8 10/100/1000 Base-T ports (PoE/PoE+) 1 10/100/1000 Base-T uplink port
<b>PoE Standard</b>	IEEE 802.3at / 802.af		
<b>PoE Power Budget</b>	54W	54W	120W
<b>Speed / Duplex mode</b>	Auto / Half / Full duplex Speed auto / 10/ 100 /1000		
<b>MAC address</b>	2K	4K	4K
<b>Maximum Number of VLANs</b>	16		
<b>Allowed VLAN ID</b>	1 ~ 4094		
<b>Port-based VLAN</b>	Support		
<b>Flow Control</b>	Support		
<b>Loop Protection</b>	Support		
<b>Unknown Unicast Suppression</b>	Support		
<b>Multicast / Broadcast Storm Suppression</b>	Support		
<b>Mirroring</b>	Many-to-One Mirroring		
<b>Port Isolation</b>	Support		
<b>Cable Testing</b>	Support		
<b>DNS</b>	DNS Client		
<b>Telnet</b>	Support		
<b>MACC</b>	Support		
<b>Port Surge</b>	Common mode: 4KV		
<b>Electrostatic Discharge</b>	Air discharge: 6KV Contact discharge: 4KV		

Model Specifications	RG-ES205GC-P	RG-ES206GC-P	RG-ES209GC-P
<b>Power Consumption</b>	≤ 60W	≤ 60W	≤ 130W
<b>Power supply</b>	External power adapter 100-240V		
<b>Dimensions (W x D x H)</b>	148mm*78mm*26mm	148mm*78mm*26mm	202*108*28mm
<b>Weight</b>	0.9 kg (with package)	0.9 kg (with package)	1.3 kg (with package)
<b>MTBF</b>	>200K		
<b>Operating temperature</b>	0 to 40°C		
<b>Storage temperature</b>	-40~70°C		
<b>Operating humidity</b>	10% to 90% RH		
<b>Storage humidity</b>	5% to 95% RH		
<b>Operating Altitude</b>	-500 ~ 5000 meters		
<b>FAN</b>	Fanless		
<b>Management</b>	Support management and configuration through web management interface, MACC cloud platform and mobile app		
<b>Safety Standard Ground Resistance</b>	GB4943-2011, EN 62638-1		
<b>EMC</b>	GB9254-2008, EN 55032, EN61000-3-2, EN61000-3-3, EN 55035		

Model	RG-ES210GC-LP	RG-ES218GC-P	RG-ES226GC-P
<b>Specifications</b>			
<b>Switching capacity</b>	20Gbps	36Gbps	52Gbps
<b>Switching Cache</b>	1.5Mbit	4.1Mbit	4.1Mbit
<b>Package forwarding rate</b>	14.8Mpps	26.8Mpps	38.7Mpps
<b>Ports</b>	8 10/100/1000 Base-T ports (PoE/PoE+), 2 10/100/1000 Base-T uplink port	16 10/100/1000 Base-T ports (PoE/PoE+), 2 10/100/1000 Base-X SFP uplink port	24 10/100/1000 Base-T ports (PoE/PoE+), 2 10/100/1000 Base-X SFP uplink port
<b>PoE Standard</b>	IEEE 802.3at / 802.af		
<b>PoE Power Budget</b>	70W	240W	370W
<b>Speed / Duplex mode</b>	Auto / Half / Full duplex Speed auto / 10/ 100 /1000		
<b>MAC address</b>	4K	8K	8K
<b>Maximum Number of VLANs</b>	16		
<b>Allowed VLAN ID</b>	1 ~ 4094		
<b>Port-based VLAN</b>	Support		
<b>Flow Control</b>	Support		
<b>Loop Protection</b>	Support		
<b>Unknown Unicast Suppression</b>	Support		
<b>Multicast / Broadcast Storm Suppression</b>	Support		
<b>Mirroring</b>	Many-to-One Mirroring		
<b>Port Isolation</b>	Support		
<b>Cable Testing</b>	Support		
<b>DNS</b>	DNS Client		
<b>Telnet</b>	Support		
<b>MACC</b>	Support		
<b>Port Surge</b>	Common mode: 4KV		
<b>Electrostatic Discharge</b>	Air discharge: 6KV Contact discharge: 4KV		
<b>Power Consumption</b>	≤ 80W	≤ 280W	≤ 443W
<b>Power supply</b>	External power adapter 100-240V	Built-in power supply	

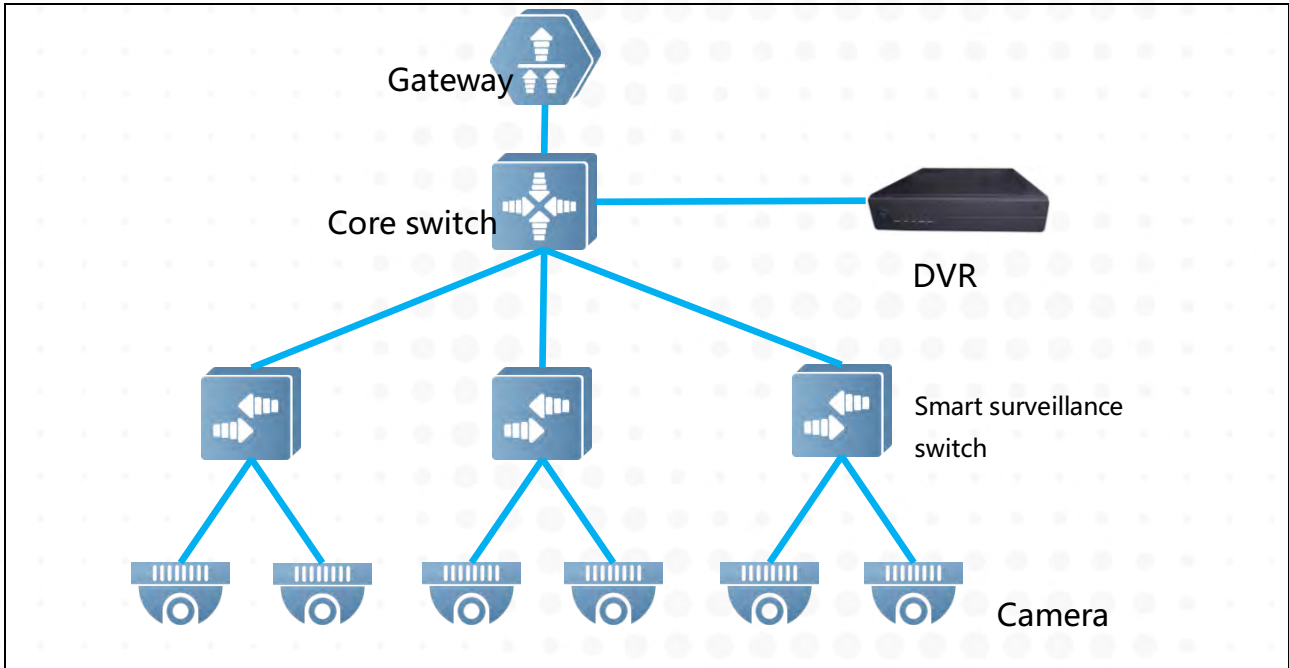
Model Specifications	RG-ES210GC-LP	RG-ES218GC-P	RG-ES226GC-P
<b>Dimensions (W x D x H)</b>	202 x 108 x 28 mm	300 x 230 x 43.6mm	440 x 289 x 43.6mm
<b>Weight</b>	1.3 kg (with package)	3.5 kg (with package)	4.2 kg (with package)
<b>MTBF</b>	>200K		
<b>Operating temperature</b>	0 to 40°C		
<b>Storage temperature</b>	-40~70°C		
<b>Operating humidity</b>	10% to 90% RH		
<b>Storage humidity</b>	5% to 95% RH		
<b>Operating Altitude</b>	-500 ~ 5000 meters		
<b>FAN</b>	Fanless	Supports adaptive speed adjustment. The fan stops running when the ambient temperature is lower than 25°C and the PoE power is less than 120W.	
<b>Management</b>	Support management and configuration through web management interface, MACC cloud platform and mobile app		
<b>Safety Standard Ground Resistance</b>	GB4943-2011, EN 62638-1		
<b>EMC</b>	GB9254-2008, EN 55032, EN61000-3-2, EN61000-3-3, EN 55035		

Model Specifications	RG-ES205GC	RG-ES208GC	RG-ES216GC	RG-ES224GC
Switching capacity	10Gbps	16Gbps	32Gbps	48Gbps
Switching Cache	1Mbit	1.5Mbit	4.1Mbit	4.1Mbit
Package forwarding rate	7.4Mpps	11.9Mpps	23.8Mpps	35.7Mpps
Ports	5 10/100/1000 Base-T ports	8 10/100/1000 Base-T ports	16 10/100/1000 Base-T ports	24 10/100/1000 Base-T ports
PoE Standard	N/A			
PoE Power Budget	N/A			
Speed / Duplex mode	Auto / Half / Full duplex Speed auto / 10/ 100 /1000			
MAC address	2K	4K	8K	8K
Maximum Number of VLANs	16			
Allowed VLAN ID	1 ~ 4094			
Port-based VLAN	Support			
Flow Control	Support			
Loop Protection	Support			
Unknown Unicast Suppression	Support			
Multicast / Broadcast Storm Suppression	Support			
Mirroring	Many-to-One Mirroring			
Port Isolation	Support			
Cable Testing	Support			
DNS	DNS Client			
Telnet	Support			
MACC	Support			
Port Surge	Common mode: 4KV			
Electrostatic Discharge	Air discharge: 6KV Contact discharge: 4KV			
Power Consumption	≤ 3W	≤ 4W	≤ 12W	≤ 14W
Power supply	External power adapter 100-240V	External power adapter 100-240V	Built-in power supply	Built-in power supply

Model Specifications	RG-ES205GC	RG-ES208GC	RG-ES216GC	RG-ES224GC
<b>Dimensions (W x D x H)</b>	119 mm x 75 mm x 24 mm	160 mm x 75 mm x 24 mm	440 mm x 165mm x 44mm	440 mm x 165mm x 44mm
<b>Weight</b>	0.36kg (with package)	0.49kg (with package)	2.7kg (with package)	2.8kg (with package)
<b>MTBF</b>	>200K			
<b>Operating temperature</b>	0 to 40°C			
<b>Storage temperature</b>	-40~70°C			
<b>Operating humidity</b>	10% to 90% RH			
<b>Storage humidity</b>	5% to 95% RH			
<b>Operating Altitude</b>	-500 ~ 5000 meters			
<b>FAN</b>	Fanless			
<b>Management</b>	Support management and configuration through web management interface, MACC cloud platform and mobile app			
<b>Safety Standard Ground Resistance</b>	GB4943-2011, EN 62638-1			
<b>EMC</b>	GB9254-2008, EN 55032, EN61000-3-2, EN61000-3-3, EN 55035			

## 4 Typical Application

Small and medium-sized surveillance network





## 5 Ordering Information

Model	Description
RG-ES205GC-P	4 10/100/1000Base-T ports (PoE/PoE+), 1 10/100/1000Base-T port
RG-ES206GC-P	4 10/100/1000Base-T ports (PoE/PoE+), 2 10/100/1000Base-T ports
RG-ES209GC-P	8 10/100/1000Base-T ports (PoE/PoE+), 1 10/100/1000Base-T port
RG-ES210GC-LP	8 10/100/1000Base-T ports (PoE/PoE+), 2 10/100/1000Base-T ports
RG-ES218GC-P	16 10/100/1000Base-T ports (PoE/PoE+), 2 SFP Base-X ports
RG-ES226GC-P	24 10/100/1000Base-T ports (PoE/PoE+), 2 SFP Base-X ports
RG-ES205GC	5 10/100/1000Base-T ports, support Web/app/MACC management
RG-ES208GC	8 10/100/1000Base-T ports, support Web/app/MACC management
RG-ES216GC	16 10/100/1000Base-T ports, support Web/app/MACC management
RG-ES224GC	24 10/100/1000Base-T ports, support Web/app/MACC management



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