



# RG-ES200 Series

## L2 Smart Surveillance Switches Datasheet

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Product Photos



RG-ES205GC-P



RG-ES209GC-P



RG-ES218GC-P



RG-ES226GC-P



RG-ES216GC



RG-ES224GC

# 1 Product Overview

With the growing video surveillance industry in China, 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, in order 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 a 16-port and a 24-port 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-ES226GC-P, RG-ES218GC-P, RG-ES209GC-P and RG-ES205GC-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.

## 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.

### **Full-power PoE supporting PoE cameras at maximum capacity**

RG-ES226GC-P, RG-ES218GC-P, RG-ES209GC-P and RG-ES205GC-P support full-power PoE output, 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-ES209GC-P	RG-ES218GC-P	RG-ES226GC-P
<b>Specifications</b>				
<b>Hardware specifications</b>				
<b>Ports</b>	4 10/100/1000 Base-T ports, 1 10/100/1000 Base-T port	8 10/100/1000 Base-T ports , 1 10/100/1000 Base-T port	16 10/100/1000 Base-T ports, 2 SFP Base-X ports	24 10/100/1000 Base-T ports, 2 SFP Base-X ports
<b>PoE/PoE+ Enabled Ports</b>	4	8	16	24
<b>IEEE802.3af / IEEE802.3at</b>	Support	Support	Support	Support
<b>Maximum PoE output power per switch</b>	54W	120W	240W	370W
<b>Switching capacity</b>	10Gbps	18Gbps	36Gbps	52Gbps
<b>Package forwarding rate</b>	7.44Mpps	13.392Mpps	26.784Mpps	38.688Mpps
<b>Surge protection</b>	Common mode: 4KV	Common mode: 4KV	Common mode: 4KV	Common mode: 4KV
<b>Electrostatic discharge</b>	Air discharge: 6KV Contact discharge: 4KV	Air discharge: 6KV Contact discharge: 4KV	Air discharge: 6KV Contact discharge: 4KV	Air discharge: 6KV Contact discharge: 4KV
<b>Power consumption</b>	≤60W	≤130W	≤280W	≤400W
<b>Power supply</b>	External power adapter	External power adapter	Built-in power supply	Built-in power supply
<b>Dimensions (W x D x H)</b>	148*78*26mm	202*108*28mm	300*230*43.6mm	440x289x43.6mm
<b>MTBF</b>	>200K	>200K	>200K	>200K
<b>Operating environment</b>				
<b>Operating temperature</b>	0 to 40°C	0 to 40°C	0 to 40°C	0 to 40°C
<b>Storage temperature</b>	-40~70°C	-40~70°C	-40~70°C	-40~70°C
<b>Operating humidity</b>	10% to 90% RH	10% to 90% RH	10% to 90% RH	10% to 90% RH
<b>Storage humidity</b>	5% to 95% RH	5% to 95% RH	5% to 95% RH	5% to 95% RH
<b>Software features</b>				
<b>MAC capacity</b>	2K	4K	8K	8K
<b>Static MAC address</b>	16	16	16	16
<b>VLAN</b>	Support 802.1Q VLAN			

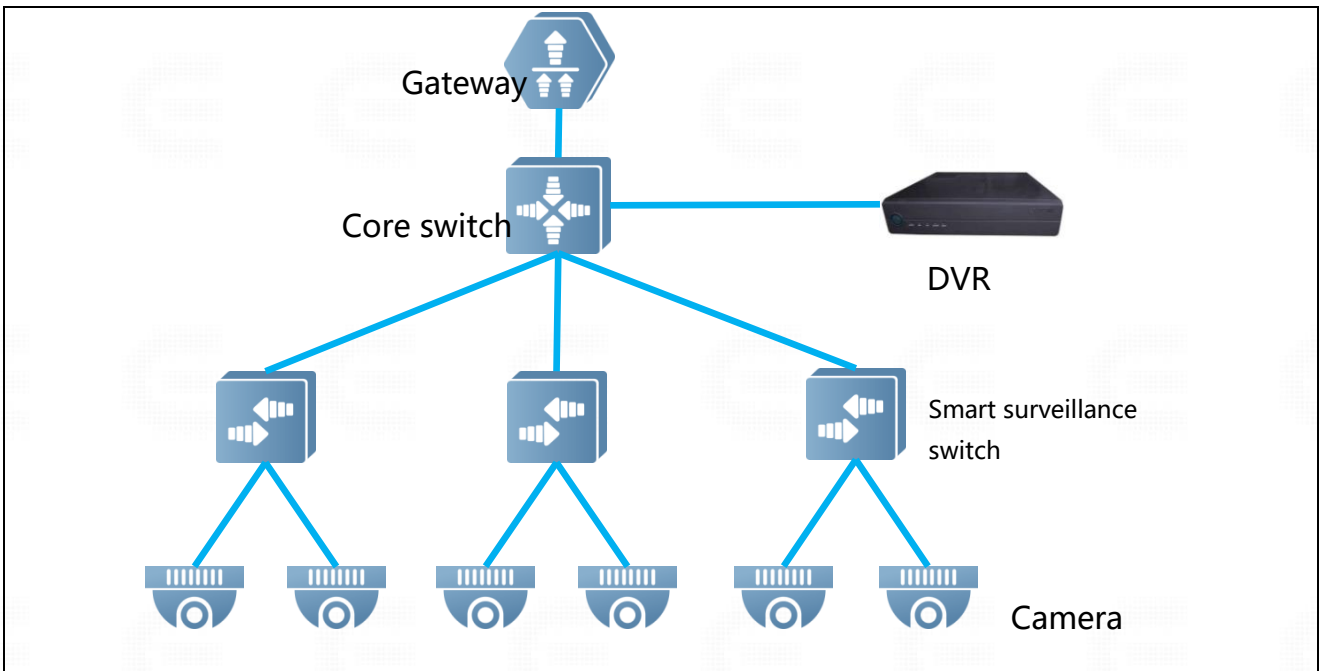


<b>Port management</b>	Support port status display, port traffic statistics, PoE port output power status, port duplex / negotiation rate configuration, flow control configuration, PoE output on/off
<b>Security</b>	Support broadcast storm suppression, port speed limit, port isolation
<b>L2 features</b>	Support port mirroring, loop protection, cable detection
<b>Management</b>	Support management and configuration through web management interface, MACC cloud platform and mobile app

Model	RG-ES216GC	RG-ES224GC
<b>Specifications</b>		
<b>Hardware specifications</b>		
<b>Ports</b>	16 10/100/1000Base-T ports	24 10/100/1000Base-T ports
<b>Switching capacity</b>	32Gbps	48Gbps
<b>Package forwarding rate</b>	24Mpps	36Mpps
<b>Surge protection</b>	Common mode: 6KV	Common mode: 6KV
<b>Power consumption</b>	<12W	<14W
<b>Power supply</b>	Built-in power supply	Built-in power supply
<b>Dimensions (W x D x H)</b>	440x165x44mm	440x165x44mm
<b>MTBF</b>	>200K	>200K
<b>Operating environment</b>		
<b>Operating temperature</b>	0 to 50°C	0 to 50°C
<b>Storage temperature</b>	-40~70°C	-40~70°C
<b>Operating humidity</b>	10% to 90% RH	10% to 90% RH
<b>Storage humidity</b>	5% to 95% RH	5% to 95% RH
<b>Software features</b>		
<b>MAC capacity</b>	8K	8K
<b>Static MAC address</b>	16	16
<b>VLAN</b>	Support 802.1Q VLAN	
<b>Port management</b>	Support port status display, port traffic statistics, port duplex / negotiation rate configuration, flow control configuration	
<b>Security</b>	Support broadcast storm suppression, port speed limit, port isolation, DHCP Snooping	
<b>L2 features</b>	Support port mirroring, loop protection, cable detection	
<b>Management</b>	Support management and configuration through web management interface, MACC cloud platform and mobile app	

## 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-ES209GC-P	8 10/100/1000Base-T ports (PoE/PoE+), 1 10/100/1000Base-T port
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-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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