20 Port Gigabit Layer 2 Smart Cloud-Managed PoE Network Switch (16x PoE+, 2x RJ45 GbE, 2x SFP), 250 W

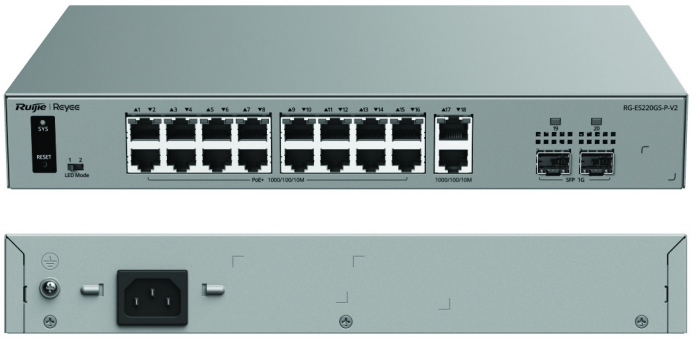
RG-ES220GS-P-V2

The RG-ES220GS-P-V2 is a 20-port Gigabit Layer 2 smart cloud-managed PoE switch designed for business, CCTV and commercial networks. It features 16 Gigabit PoE/PoE+ ports with a substantial 250 W power budget, two additional Gigabit Ethernet ports and two Gigabit SFP uplinks. Camera recognition, PoE watchdog, AI-powered failover and ERPS improve network reliability, while lifetime-free Ruijie Cloud management enables convenient remote configuration, monitoring and maintenance.

3-Year Manufacturer's Warranty
For full terms & conditions, please see – Ruijie Warranty T&Cs.

Features and Benefits

- 16 Gigabit PoE/PoE+ ports with a 250 W power budget provide high-speed data and power for cameras, access points and other PoE devices.
- Two additional Gigabit Ethernet ports and two Gigabit SFP ports provide flexible copper and fibre uplink connectivity.
- IP camera recognition and PoE watchdog simplify CCTV management and automatically restart unresponsive cameras.
- Uninterrupted PoE during a warm restart keeps connected devices powered, helping minimise surveillance and network downtime.
- AI-powered failover and ERPS network redundancy help maintain service continuity if a connection or network link fails.
- Lifetime-free Ruijie Cloud and Reyee App management enable remote configuration, monitoring and maintenance from anywhere.



Specifications

Hardware Specifications

Product Information

Warranty	3 years

Port Specifications

Total number of RJ45 ports	18
Total number of optical ports	2
Number of 1GE SFP ports	2
Number of 10/100/1000BASE-T ports	18
Reset button	1
DIP switch	LED mode switch toggled to left (Mode 1): The port LED status indicates the status of traffic transmission. Solid green means that the port is link up, while blinking green means that the port is transmitting and receiving data. LED mode switch toggled to right (Mode 2): The port LED status indicates the PoE status. Solid green means that the port is supplying power, while blinking green means that the port is in power overload state.

Power Supply and Consumption

PoE Out standard	PoE/PoE+ (IEEE 802.3af/at)
Number of PoE Out ports	16
Number of PoE/ PoE+ Out ports	16

Power Supply and Consumption (continued)

PoE budget	250 W
PoE power pins	1-2 (+), 3-6 (-)
Power input	220 V AC power supply: • Rated input voltage: 100 V AC to 240 V AC, 50 Hz to 60 Hz • Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz • Rated input current: 6 A
Maximum power consumption	20 W (with no PoE load) 287 W (with full PoE load)
Power supply	Fixed power supply

System Specifications

Flash memory	8 MB
Forwarding rate	29.76 Mpps
Switching capacity	40 Gbps(bit/s)

Dimensions and Weight

Casing	Metal
Product dimensions (W x D x H)	300 mm x 223 mm x 43.6 mm (11.81 in. x 8.78 in. x 1.72 in.)
Weight	2.06 kg (4.54 lbs) (without packaging materials)
Shipping weight	2.95 kg (6.50 lbs)

Environment and Reliability

Fan	1 x fixed fan
Cooling	Air cooling, left-to-right airflow
Acoustic noise	25°C (77°F): 40 dB 40°C (104°F): 50 dB
Mounting options	Rack/Desk
Hot swapping of cables	Hot swapping supported by the service port and power connector
MTBF	200,000 hours
Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-40°C to +70°C (-40°F to +158°F)
Operating humidity	10% RH to 90% RH (non-condensing)

Environment and Reliability (continued)

Storage humidity	5% RH to 95% RH (non-condensing)
Altitude	-500 m to +5,000 m (-1,640.42 ft. to +16,404.20 ft.)
ESD protection	Air discharge: 8 kV Contact discharge: 6 kV
Surge protection	Service port: ±6 kV for common mode Power connector: ±6 kV for common mode and ±6 kV for differential mode

Certification and Regulatory Compliance

EMC	EN 55032 EN IEC 61000-3-2 EN 61000-3-3 EN 55035 EN 300 386
Safety compliance	EN 62368-1 IEC 62368-1
Certification	CE, CB

Software Specifications

Authentication

RADIUS	No
802.1X authentication	No

Basic Configurations

PoE watchdog	Yes
Uninterruptible power supply upon warm start	Yes
Online upgrade	Yes

Ethernet Switching

Maximum number of VLANs	32

Ethernet Switching (continued)

Maximum number of MAC address entries	16000
Interface flow control	Yes
IEEE 802.1Q VLAN	Yes
LLDP	No
LLDP-MED	No
Static MAC address	Yes
Static aggregation	Yes
LACP	No
Inbound or outbound rate limiting based on interface traffic	Yes

Gateway Features

802.1p priority-based traffic classification	No
DSCP priority-based traffic classification	No

Interface

Jumbo frame length (MTU)	12000 bytes
EEE	Yes
Cable test	Yes

IP Routing

IPv4 static route	No
IPv6 static route	No
OSPFv2	No
OSPFv3	No

IP Service

ARP	No
IPv4 ping	Yes
IPv4 traceroute	No

IP Service (continued)

ICMPv6	No
IPv6 ping	No
IPv6 traceroute	No
DNS client	Yes
DHCP client	Yes

Multicast

IGMPv1 snooping	No
IGMPv2 snooping	No
Basic IGMPv3 snooping	No
Full IGMPv3 snooping	No
IGMP filtering	No
IGMPv1, v2, and v3	No

Network Management and Monitoring

Fan speed adjustment	Automatic speed adjustment
Mirroring	Yes
HTTP login	Yes
HTTPS login	Yes
SON	Yes
Syslog	No
Camera detection	Yes
eWeb management	Yes
Ruijie Cloud management	Yes
Ruijie Reyee App management	Yes
SNMPv1, v2c, and v3	No

Reliability

Load balancing	No
ERPS	Yes

Security

Port isolation	Yes

Security (continued)

Broadcast storm control	Yes
Multicast storm control	Yes
Unknown unicast storm control	Yes
DHCP snooping	Yes
Standard ACL	No
Extended MAC ACL	No
Extended IP ACL	No
IPv6 ACL	No
ARP anti-spoofing	No
CPU Protection Policy	Yes

System Performance Capacity

Recommended camera limit	200W H265: 100 400W H265: 50

Package Contents

Device

Device	1

Accessories

Rubber pad	4
Power cord retention clip	1
Screw	6 x M3 x 6 mm cross recessed countersunk head screws
Power cord	1 x 1.8 m (5.91 ft.)
Rack-mount bracket	2

Manual

User Manual	1
Warranty Card	1