

RP-PG83240I-4F-S/H

24-P Gigabit + 4-SFP (1G/2.5G) slot L2+ Managed PoE Switch



The RP-PG83240I-4F-S/H is a Layer 2 switch designed for enterprise networks. It offers 24 gigabit PoE ports and 4 1G/2.5G SFP slots, providing flexible connectivity options. With a PoE power budget of up to 400W, it can reliably power connected devices. The switch has a switching capacity of 56Gbps, ensuring efficient data transmission and high-performance networking.

This switch is equipped with comprehensive end-to-end Quality of Service (QoS) capabilities, allowing for effective prioritization of network traffic. It also offers flexible management options and advanced security settings, making it well-suited for networks that require high-speed, secure, and intelligent solutions at an affordable price. With its powerful network security features, it enables effective control of data traffic for Internet Service Providers (ISPs) and supports applications such as VoIP, video streaming, and multicast services.

In addition to its networking capabilities, the RP-PG83240I-4F-S/H has a maximum power consumption of 250W, making it a reliable power solution for SMBs deploying Power over Ethernet (PoE) networks. RP-PG83240I-4F-S/H combines performance, QoS capabilities, security features, and power efficiency to meet the networking needs of enterprises.

Features

- Complies with IEEE802.3af and IEEE802.3at PoE standard
- Smart and standard PoE chipset for automatic PD equipment detection, preventing damage.
- Layer 3 features: IPv4/IPv6 static routing, DHCPv4/ DHCPv6 client, DHCPv4 relay, DHCP relay.
- Port features: Supports port aggregation, IEEE802.3x flow control, port isolation, port mirroring, loop detection and broadcast storm suppression
- VLAN: Supports IEEE802.1Q tagged VLAN, mac based VLAN, IP based VLAN, protocol based VLAN, voice VLAN and private VLAN.
- QinQ: Supports port-based, VLAN-based and flow-based Qin
- Supports GVRP/LLDP/SPAN/RSPAN/DHCPv4 snooping
- Layer 2 ring network protocol: Supports STP, RSTP, MSTP, G.8032 ERPS protocol, single ring, sub ring
- Multicast: IGMP snooping, IGMP v1, v2, v3, PIM-SM
- QoS: QoS class, remarking, Supports SP, WRR queue scheduling, Ingress/Egress port-

based rate-limit and policy-based QoS

- Security: Supports ACL, 802.1x， port-security, IP source guard, ARP-check, DAI, anti-gateway ARP spoofing, Ddos attack protection, telnet/SSH/HTTP/HTTPS user access control and AAA.
- Reliability: Loop detect based on port or VLAN, the Ethernet in the first mile 802.3ah
- Management: Supports IPv4/IPv6 dual stack management, system log management, user management, login service management, firmware management, web management, CLI management, fault detection, DNS,NTP, sFlow, SNMP, MQTT, RMON and dual partition management.
- Application protocol: Supports telnet server, telnet client, SCP, SFTP, SSH server, TACACS and TFTP client

Specifications

Standards	• IEEE 802.3 10Base-T Ethernet • IEEE 802.3u 100Base-TX Ethernet • IEEE 802.3ab 1000Base-T Ethernet • IEEE 802.3z 1000Base-X Ethernet • IEEE802.3x Flow Control and Back Pressure • IEEE 802.1D Spanning Tree Protocol • IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1Q VLAN • ITU-T G.8032 ERPS • IEEE 802.1X Port Authentication Network Control • IEEE 802.1ab LLDP • IEEE 802.3ad LACP • IEEE 802.3af PoE • IEEE 802.3at PoE+
Interface	• 24 x 10/100/1000Base-T RJ45 PoE ports • 4 x 1G/2.5G Base-X SFP+
Size of RAM	• 512MB
Size of Flash	• 512MB
Management port	• 1 x RJ45 Console port
Switching capacity	• 68Gbps
Packet forwarding rate	• 101Mpps
MAC address table	• 16K
VLAN	• 4K
Buffer	• 12M bit
Forwarding delay	• <5us
Jumbo Frame	• Support 10Kbytes
MDX/MIDX	• Support
Watchdog	• Support
Layer 2 function	
Port aggregation	• Support GE port aggregation • Support 2.5GE aggregation • Support static aggregation • Support LACP dynamic aggregation • Up to 64 aggregation groups and up to 8 ports per group

Port features	• Support IEEE802.3x flow control • Support interface counters • Support port isolation • Port mirroring (One-to-One, Many-to-One) • Support loop detection(Port-based; VLAN-based) • Support broadcast storm suppression(broadcast; unknown multicast; unknown unicast)
Mac-address table management	• Support static Mac-address management • Support dynamic Mac-address Management • Support filtering Mac-address • Support MAC limit based on port and VLAN • Support MAC flapping based on port and VLAN • 16K Mac-address table size
VLAN	• IEEE802.1Q tagged VLAN • Mac based VLAN • IP based VLAN • Protocol based VLAN • Voice VLAN, specially divide VLAN for user voice data flow • Private VLAN, divide a VLAN broadcast domain into multiple subdomains to form a double-layer VLAN structure • VLAN range: 1-4094 • Support access mode/trunk mode/hybrid mode
GVRP	• Normal mode • Fixed mode • Forbidden mode
QinQ	• Port-based QinQ • VLAN-based QinQ(VLAN-stacking; VLAN-mapping) • Flow-based QinQ
SPAN	• Number of Sessions: 7 • Many-to-one
RSPAN	• Remote Switch Port Analyzer
MSTP	• 802.1D STP • 802.1W RSTP • 802.1S MSTP • BPDU Guard • Number of Single Ring Device Connections: 20
LLDP	• LLDP (Link Layer Discovery Protocol) • Med
ERPS G.8032	• Major ring • Sub ring • Recovery time ≤20ms • Number of Single Ring Device Connections: No limit
QoS	• QoS Class, Remarking • Support SP, WRR Queue Scheduling • Ingress Port-based Rate-limit • Egress Port-based Rate-limit • Egress port-queue shaper • Policy-based QoS • Port Queue Numbers: 8
DHCPv4 Snooping	• DHCP snooping trust port

	• DHCP snooping option-82 • DHCP snooping circuit-id and remote-id customized
Multicast functions	
IGMP	• IGMP v1, v2, v3
IGMP Snooping	• Internet Group Management Protocol Snooping • Fast Leave • Multicast Table Size: 1K
PIM-SM	• Protocol Independent Multicast-Sparse Mode
Security functions	
ACL	• IP Standard ACL • MAC extend ACL • IP extend ACL • IPv6 ACL • Time Range • ACL apply on VLAN • ACL entries, include input and output
802.1x	• Port access control • Mac-address access control • RADIUS server
Port-security	• Port-security
IP source guard	• IP Source Guard, Port-based IP/Mac Binding Access
ARP-check	• Support ARP-check and ARP packet filtering for illegal users
DAI	• Dynamic ARP Inspection
Anti-gateway ARP Spoofing	• Prevent Gateway ARP Spoofing
Ddos	• Ddos attack protection
Access control	• Support Telnet/SSH/HTTP/HTTPS user access control
AAA	• RADIUS authentication access switch • TACACS authentication access switch • Authorization
Reliability	
Loop Detect	• Loop detect, based on port or VLAN
EFM	• The Ethernet in the first mile, 802.3ah
Management & Maintenance functions	
Dual Stack	• IPv4 and IPv6 Dual Stack Management
System Log Management	• Syslog Level 7 to 0 • Corresponding Debug/Info/Notice/Warning/ Err/ Critical/ Alert • Support connecting up to 3 Servers • For IPv4 and IPv6
User Management	• Support password protection, support MD5/SHA256/SHA512 algorithm • Local Management of User Privilege • Remote authorization by RADIUS or TACACS • Enable privilege protection • User password complexity requirements • User login fail protection

	• User Privilege Level 0 to 15
Login Service Management	• Up to 8 users online simultaneously • Access control based on IPv4 or IPv6 ACL
Firmware Management	• Firmware upgraded by WEB • Firmware upgraded by CLI • Dual partition
Web Management	• Web Management • Support HTTP V1.1 • Support HTTPS • For IPv4 and IPv6
CLI management	• Console/Telnet command line management
RMON	• Support RMON(Remote Monitoring) alarm
Fault Detection	• Ping/Tracerout, For IPv4 and IPv6 • Support optical transceiver DDM function • One click fault information collection • Cable detection
DNS	• Domain Name Sytem
PoE management	• Support 802.3af/802.3at • Support PD watchdog • Support PoE priority management • Support Max PoE power configuration for each port • Support alarm waterline configuration • Support reserved power configuration • Support PoE schedule • Support PoE legacy mode
Dual partition management	• Support dual partition switching
NTP	• Network Time Protocol • Support domain name configuration
Configuration import/export	• Support FTP/TFTP remote import/export
sFlow	• Sampled flow
SNMP	• Version SNMPV2C/V3
MQTT	• Message Queuing Telemetry Transport
RMON	• Support RMON (Remote Monitoring) alarm
Application Protocol Functions	
Telnet server	• Support telnet server for IPv4 and IPv6
Telnet client	• Support telnet client for IPv4 and IPv6
SCP (Secure Copy Protocol)	• SCP client/server for IPv4 and IPv6
SSH server	• Support login based on user password-SSH2, support IPv4, IPv6 • Support public key-based login
TACACS	• Support TACACS(the terminal access controller accesses the control system)

TFTP	• Support TFTP Client
Layer 3 functions	
Static Route	• Support VLAN interface and route port • IPv4 static routing table entry configuration • ARP dynamic learning and static configuration • IPv6 static routing table entry configuration • Neighbor discovery and static configuration • Routing prefix table size 4k for IPv4, for IPv6 divide by 4
DHCPv4 Client	• Dynamic host configuration protocol for IPv4
DHCPv6 Client	• Dynamic host configuration protocol for IPv6
DHCPv4 Relay	• DHCP Relay for IPv4
DHCPv4 Server	• DHCP Server for IPv4
Mechanical structure	
LED Indicators	• PWR (Power indicator) • 1-24(Woking status indicator) Green/Red/Yellow Green indicator on: ports link up Red indicator on: PoE working Yellow indicator on: ports link up and PoE working • 25-28 (Fiber ports indicators) Green
Power supply	• VAC input • Rated voltage range: 100-240V • Frequency: 50/60Hz
power consumption	• Full loading ≤24W • PoE power budget≤ 400W
Over-current protection	• Support
Installation method	• Desktop Installation/Rack mountable
Dimension(W*D*H)mm	• 440*180*45mm
Environment	• Operating temperature: 0°C -50°C • Storage temperature: -10°C - +70°C • Working humidity：10%-90%RH • Storage humidity：5%-95%RH
Power surge protection	• 4KV
Ethernet ports surge protection	• 4KV
Certification	• CE/FCC

Ordering information

RP-PG83240I-4F-S/H	24-P Gigabit + 4-SFP(1G/2.5G) slot L2+ Managed PoE Switch (400W)

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