# Product Specifications



## 24GE+4G Combo+4G SFP L2+ Managed PoE Switch (SR-SG3428FCP)

- Gigabit L2+ managed POE switch.
- 28 10/100/1000Mbps RJ45 and 4G SFP ports.
- 24 POE ports support 802.3af/at.
- Support VLAN, ACL, IPV6, SSL, SNMP.
- Support 802.1X certification.
- Support ERPS ring network.
- Support RSTP/MSTP spanning tree.
- Support AI smart POE, automatically detect PD devices, Support PoE Watchdog.

## Product Description

SR-SG3428FCP is a layer 2+ managed PoE switch equipped with 24 Gigabit RJ45 ports, 4G Combo, 4G SFP fiber ports, and 1 console port. All RJ45 Ports support the 802.3af/at IPoE+ standard, supplying total PoE power of 400W.

With abundant layer 2+ management features supported, the SR-SG3428FCP is capable of delivering high throughput and stable performance meeting edge-of-network security group, while in small networks it can act as a backbone for Gigabit switches and high-speed servers. L SFP slots provide greater flexibility.

The SR-SG3428FCP is designed exclusively for the networking needs of growing businesses, with an extensive suite of management and security features available. These devices are cost-effective for small and medium-sized businesses, providing ideal solutions for a variety of network scenarios.

## Features

- Supports IEEE 802.3i, 802.3u, 802.3ab, 802.3z, 802.3x , 802.3az, 802.3at, 802.3af.
- 24 POE ports support 802.3af/at, per port up to 30W, and 380W Poe budget.
- Provides 24 10/100/1000Mbps RJ45 ports, 4G Combo ports, and 4G SFP fiber ports.
- Supports MAC address auto-learning and auto-aging.
- Store and forward mode operates.
- LED indicators for monitoring power, link/activity.
- Supports QoS, port mirroring, link aggregation protocol.
- 19 inches full metal iron shell and internal power adapter design, suitable for rack installation.

## Energy saving and low noise:

- Following the IEEE 802.3az (Energy Efficient Ethernet) standard, it greatly reduces the power consumption of the equipment and it's green and energy-saving.
- Fully considering the low noise requirements of the user environment, the fanless design is adopted to minimize the temperature in the system in real time, which can effectively reduce noise pollution.

## Simple and flexible operation and maintenance management:

- Supporting unified management of the entire network configuration and web management of single switch operations and improve deployment reliability.
- Supports power alarm and port status alarm, users can set the alarm mode correspondingto the power supply of the device and the port, which is convenient for user operation and maintenance.
- Supports perfect SNMP management, support YCT, DDM (Digital Diagnostic Monitoring) and other functions, support Source Guard, Source MAC address filtering to prevent ARP spoofing.
- It supports the function of sending information to the server. The logs generated by the device are sent to the information server in a unified manner. Through the unified management platform of the information server, the flexible output of information is realized, which is convenient for monitoring the running status of the equipment and locating faults.

## Enhanced protection, safe and controllable

- Supports a variety of security protection mechanisms, provides various DOS-type attack defense technologies such as SYN Flood, Land, ICMP Flood, supports BPDU Filter, BPDU Guard, and other network faults and rapid loops and illegal edge devices become root nodes, preventing unnecessary topological oscillations.
- In terms of anti-attack measures for the user layer, it supports both port-based and VLAN-based ARP detection and IP Source Guard. The combination of the two can effectively prevent illegal address spoofing such as MAC, IP, and MAC+IP, and can also reduce ROM table usage.
- Supports the source MAC address learning restrictions of port-based and VLAN-based, which can prevent illegal user source MAC address from occupying device MAC table entries, causing normal users to fail to learn the MAC table and flooding. Through the DAI function, illegal ARP packets can be prevented from entering the network through ARP toopholes, which can minimize the intermittent and frequent disconnection in the network caused by network use, and increase the security and availability of the network.
- Supports custom ACL, more flexible to match the Ethernet header or IP header of the packet according to user requirements. Provides a complete ACL policy, can classify data according to the packet fields of the packet, and use different policies for forwarding.
- It supports standard 802.1X authentication access, and at the same time supports extended 802.1X authentication access, which can effectively prevent IP conflicts and IP cloning, and realize extended authentication functions such as static IP address delivery.
- It supports Web Portal authentication access, and can push Web Portal page authentication for access users based on Http and Https two protocols.

## Redundant backup, stable and reliable

- The first to support the industry-standard ERPS ring network solution, support single-ring networking mode, <20ms convergence speed, and achieve carrier-class reliability.
- Multi-process MSTP is supported, each process can run different spanning tree protocols, and the network can be divided into multi-rings in layers and at the same time, the network access ring can be realized by creating a new MSTP process, which does not affect the original service traffic and reduces network impact.
- Built-in lightning protection technology, service ports provide 4KV lightning protection capability, effectively resist lightning strikes, more adaptable to harsh environments than ordinary switches, and greatly reduce the damage rate of equipment.

## VLAN expansion, abundant and diverse

- Supports common QinQ and flexible QinQ technologies, giving users maximum freedom to configure QinQ policies.
- Supports multiple VLAN types such as protocol VLAN, MAC VLAN and Voice VLAN, and plays a role in multi-service converged networks.

## Hardware Specification

| SR-SG3428FCP | |
|---|---|
| Power Supply | AC100~240V 50/60Hz |
| Standards | IEEE 802.3i,802.3u,802.3ab,802.3z,802.3az,802.3at,802.3af |
| Ports | 28 x 10/100/1000Mbps RJ45 ports, 4 x 1000Mbps SFP fiber ports,1x Console port |
| Indicators | Electrical port indicator, optical port indicator, power input indicator, system running indicator |
| Network Media (Cable) | 10Base-T: UTP category 3, 4, 5 cable (maximum 100m)<br>100Base-TX: UTP category 5, 5e cable (maximum 100m)<br>1000Base-T: UTP category 5e, 6 cable (maximum 100m)<br>1000Base-X: MMF,SMF |
| Dimensions | 440*295*44.5 mm |
| Poll port | 24 802.3at/af standard POE |
| Poll Pin Definition | 1/2+,3/6- |
| Total power | 400W |
| Transfer Method | Store-and-Forward |
| MAC Address | 8K |
| Switching Capacity | 56Gbps |
| Packet Forwarding Rate | 41.664Mpps |
| Packet Buffer Memory | 6.1Mbit |
| Jumbo Frame | 10KBytes |
| Environment | Operating Temperature: 0℃ ~45℃ (0 ℉ ~113 ℉)<br>Storage Temperature: -40℃ ~70℃ (-40 ℉ ~158 ℉)<br>Operating Humidity: 10%~90% non-condensing<br>Storage Humidity: 5%~95% non-condensing |

## Software Features

| | |
|---|---|
| L3 Switching Features | • Static Routing<br>IPv4/IPv6<br>• Address Resolution Protocol (ARP)<br>Static ARP<br>• 8K MAC Address Table<br>• 10K(10000) Jumbo Frame |
| L2 Switching Features | • Flow Control<br>802.3x (Full-duplex)<br>Back-Pressure (Half-duplex)<br>• Spanning Tree<br>IEEE 802.1D (STP)<br>IEEE 802.1w (RSTP)<br>IEEE 802.1s (MSTP)(16 instances)<br>Auto Edge<br>BPDU Filtering<br>• ERPS<br>• Link Aggregation<br>IEEE 802.3ad LACP<br>Static Trunk<br>Max 8 Group<br>Max 8 Ports/Group<br>Traffic-load Balancing<br>• Surveillance VLAN<br>OUI MAC (Auto/Manual)<br>• Voice VLAN<br>16 OUI Mode (Auto/Manual) |
| VLAN | • QinQ (IEEE 802.1ad)<br>Basic<br>• GARP VLAN Registration Protocol (GVRP)<br>• 4096 Static VLAN<br>• IEEE 802.1Q Tagged-based<br>• 8 group Protocol-based<br>• 256 MAC-based |
| Multicast | • Common<br>256 Multicast Groups<br>Immediate Leave<br>Multicast Router Port<br>Static/Forbidden Forward Port<br>128 profiles Filtering<br>Throttling<br>• IGMP Snooping<br>IGMP v1/v2<br>IGMP v3 Basic (BSS)<br>IGMP v3 Full Querier<br>• MLD Snooping<br>MLD v1/v2<br>• Multicast VLAN Registration (MVR)<br>IPv4<br>• Trusted QoS<br>• Queue Scheduling<br>WRR<br>Strict<br>Strict Priority<br>Hybrid(WRR+SP or WFQ+SP) |
| Quality of Service (QoS) | • Class of Service<br>Port-based<br>802.1p<br>IP TOS Precedence<br>IP DSCP<br>• Rate Limit<br>Port-based (Ingress/Egress) |
| Access Control List (ACL) | • ACL Type<br>L2/L3/L4<br>512 MAC-based<br>512 IPv4-based<br>512 IPv6-based<br>• Port Function<br>Power<br>Current<br>Voltage<br>PoE Watch Dog<br>• Access Rules<br>1024<br>• AAA Authentication<br>• 8 TACACS+<br>• 8 RADIUS |
| Security | • Authentication Manager<br>IEEE 802.1X<br>MAC-Auth<br>Web Auth<br>Port-based VLAN<br>Port-based<br>Host-based<br>• Account Manager<br>Local Authentication<br>8 Multiple User Account<br>Multi-Level Security Manager/Operator/<br>Password Recovery Procedures<br>• Management Access Management VLAN<br>256Management ACL<br>• SSL<br>SSLv3<br>SSLv3<br>TLSv1<br>• Web(s)<br>HTTPS<br>• CLI<br>SSH v1/v2<br>• Port Security<br>IP& Dynamic Lock<br>• Storm Control<br>Broadcast<br>Unknown Multicast<br>Unknown Unicast<br>• Time-range Time Range<br>• BPDU Guard<br>• Protected Port (Port Isolation)<br>• Black Hole MAC<br>• CPU Defense Engine<br>• DoS Prevention<br>• DHCP Snooping (with Option 82)<br>• Dynamic ARP Inspection<br>• ZTE/H3C Source Guard<br>• IPV4&IPV6 Joint Binding (IMPB)<br>• Dynamic VLAN Assignment |
| IPv6 | • IPv6 Host<br>Auto Configuration<br>Static IPv6 Address and Prefix Length<br>Static IPv6 Default Gateway<br>IPv6 Neighbor Discovery (ND)<br>IPv6 Duplicate Address Detection (DAD)<br>ICMPv6<br>• IPv6 Application<br>HTTP/HTTPS<br>TELNET<br>SSH<br>PING<br>DHCP<br>Syslog<br>IPND<br>DHCPv6 |
| Management | • CLI<br>3 sessions Console<br>3 sessions Telnet (RFC854)<br>• Web(s)<br>HTTPS<br>• SNMP(v1/v2c/v3)<br>• File Management<br>Firmware Upgrade/Backup<br>Dual Images<br>Configuration Download/Backup<br>Multiple Configurations<br>• Upload/Download<br>TFTP(RFC783)<br>HTTP<br>UART<br>• Time Management<br>Local<br>SNTP<br>• Port Management<br>Friendly Port Name (Port Description)<br>Error Disabled Recovery<br>• Line Management<br>Console<br>Telnet (RFC854)<br>SSH v1/v2<br>• DHCP<br>Client<br>• DNS<br>Client<br>• Software Reset Button<br>• IEEE 802.3az1<br>• 32 entries / type RMON Management |
| Discovery | • IEEE 802.1AB Link Layer Discovery Protocol (LLDP)<br>• ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) |
| Diagnostics | • UDLD<br>• Mirroring<br>4 sessions port-based (Many to One)<br>• Syslog (RFC3164)<br>Local RAM<br>Local Flash<br>Remote Server<br>• System Diagnostics<br>CPU Utilization<br>Memory Utilization<br>Port Utilization<br>Technical Support Log<br>• Port Diagnostics<br>Cable Test<br>Fiber Module Status<br>• Network Diagnostics<br>Ping Test<br>Traceroute |
| MIB | • RFC1213 MIB2 (System & Interface groups)<br>• RFC2819 RMON (1,2,3, & 9 groups)<br>• RFC1215 Generic Traps<br>• RFC1493 Bridge<br>• RFC2674 Bridge MIB Extensions<br>• RFC2737 Entity<br>• RFC3635 Ethernet-Like<br>• RFC2863 Interface Group<br>• SNMP-Community-MIB<br>• SNMPv3-MIB |