52 Port 10G Uplink 48 Ports Gigabit L3 Management Ethernet POE switch

# 【Product Description】

SY-48G410G4SMP is 52 Port 10G Uplink 48 Ports Gigabit L3 Management Ethernet POE switch, provides 48\* 10/100/1000M POE Ethernet Ports, 4\* 10G SFP+ Ports, 1\* console Port, 1\* USB Serial Port. With perfect security control policy and CPU Protect Policy, it can improve fault tolerance and ensure the stable operation of the network and load balance of links. The switch supports automatic DoS attack defense, SNMP, IEEE 802.1, STP, RSTP, and link aggregation. With advanced security features and advanced quality of Service (QoS), it can be used as a core, distribution or access layer switch with high-end port density, ease of management, it is an ideal choice for a variety of business networking applications.

# 【Main Feature】

* Support IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, IEEE 802.1p, IEEE 802.3. IEEE 802.3u, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3ae standard;
* L3 management，support DHCP Server, QoS, ACL Control, SNMP V1/V2/V3, IGMP Snooping v1/v2；
* Support STP/RSTP/MSTP (ERPS), Support loop detection and self-healing, remote loop back monitoring and control (802.3ah OAM);
* Support multiple VLAN divisions, MAC VLAN, protocol VLAN, and Private VLAN;
* Support IP address +MAC address +VLAN+ port binding, DHCP Snooping, IP source and DAI protection;
* Support IPV4/ IPV6, RIP, OSPF
* Surge Protection: Common mode≥6KV, ESD：Contact≥6KV. air≥8KV;
* Support WEB, TELNET, CLI, SSH, SNMP, RMON management;
* Support IEEE802.3at (30W) and IEEE802.3bt (90W);
* Support PoE watchdog, PoE Port power supply, Power configuration and PoE time management.

# 【Application Environment】

* Metro Optical Broadband Network: Data network operators such as telecommunications, cable TV, and network system integration,etc.
* Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
* Multimedia transmission: Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications
* Real-time monitoring: Simultaneous transmission of real-time control signals, images and data

# 【Specification】

|  |  |
| --- | --- |
| **I/O Interface** | |
| Power Input | AC100-240V/50-60Hz |
| Ethernet | 48\* 10/100/1000Mbps POE Ports (Ports 1-8 support BT Power Supply) 4\* 10G SFP+ Port  1\* RJ45 Console Port 1\* USB serial Port |

|  |  |
| --- | --- |
| Performance | |
| Bandwidth | 176Gbps |
| Packet Forwarding Rate | 131Mpps |
| Buffer Memory | 512MByte |
| Flash Memory | 32MByte |
| DDR SDRAM | 16Mbit |
| MAC Address | 32K |
| Jumbo Frame | 12Kbytes |
| VLANs | 4096 |
| MTBF | 100000 Hours |
| **Standard** | |
| Network Protocol | IEEE802.3 Ethernet MAC Protocol IEEE802.3u 100BASE-TX Fast Ethernet  IEEE 802.3ab 1000BASE-T Gigabit Ethernet  IEEE 802.3z 1000BASE-X Gigabit Ethernet (optical fiber) IEEE 802.3ae 10G Ethernet  IEEE802.3x Flow Control  IEEE 802.3az Energy-efficient Ethernet  IEEE 802.3ad Standard method for performing link aggregation IEEE 802.1AB LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1D Spanning Tree Protocol(STP)  IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1Q （VLAN Bridge Operation）  IEEE 802.1p （VLAN Label）  IEEE 802.1X Client/Server Access Control and Authentication Protocol |
| POE Standard | IEEE802.3af (15.4W). IEEE802.3at (30W), IEEE802.3bt (90W) |
| Industry Standard | EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD),  EN61000-4-4 (EFT), EN61000-4-5 (Surge) |
| Network Medium | 10Base-T : Cat3, 4, 5 or above UTP(≤100m) 100Base-TX : Cat5 or above UTP(≤100m) 1000Base-TX : Cat5 or above UTP(≤100m) |

|  |  |
| --- | --- |
| **Certification** | |
| Safety Certificate | CE, RoHS |
| **Environment Standard** | |
| Working Environment | Working Temperature：-10~50°C Storage Temperature：-40~70°C  Working Humidity ：10%~90%，non-condensing Storage Temperature：5%~90%，non-condensing |
| **Function Indicator** | |
| Indicator | PWR (Power Indicator), SYS (system Indicator), Link (Link Indicator), ACT (ACT Indicator) |
| PWR | On: Powered On Off: Powered Off |
| SYS | On: System On  Flashing: System Off or Failed |
| Link/ACT | On: Link Connecting Flashing: Data Transmitting Off: Link Off |
| **Physical Specification** | |
| Structure Size | Product Dimensions: 440\*360\*44.5mm Package Dimensions: 580\*440\*120mm Product N.W: 5.30KG  Product G.W: 6.58KG |
| Packing Info | Carton Dimensions: 600\*460\*260mm Packing Quantity: 2Pieces  Packing weight: 14.2KG |
| Power Voltage | Working Voltage: AC100-240V 50/60Hz Power Supply: 52V 11.5A/ 12V 6A |
| Power Consumption | POE: POE Total Power<600W  Power Consumption: Machine<67.5W |
| Package List | Switch: 1 set; instruction manual: 1 set; certificate of quality: 1 set; power cord: 1 set; serial cable: 1 set; mounting ear: 1 pair |
| **Order Info** | |
| SY-48G410G4SMP | 52 Port 1G Uplink 48 Ports Gigabit L3 Management Ethernet POE switch |

**【Software Function】**

|  |  |
| --- | --- |
| Basic Function | Support hardware watchdog, factory reset, system and port LED |

|  |  |
| --- | --- |
|  | Support global information, statistical information, log information |
| Support User management, alarm management, configuration management |
| Support Port rate, duplex, flow control, maximum frame length configuration |
| Support Port mirroring, port speed limit, port energy saving |
| PoE Function | Support PoE time management |
| Support PoE automatic monitoring and watchdog |
| Support PoE Port power supply and power configuration |
| Layer 3 Interface | Support Layer 3 Interface |
| Support IPv4, IPv6 address Configuration |
| Support ARP Configuration |
| Support ND Configuration |
| Layer 3 Routing | Support IPv4 static routing |
| Support IPv6 static routing |
| Support RIP V1/V2 |
| Support OSPF |
| DHCP | Support DHCP server |
| Support DHCP Relay |
| Support DHCP Snooping |
| VLAN | Support 4K VLAN |
| Support 802.1Q VLAN, based on port VLAN |
| Support Access, Trunk, Hybrid VLAN mode |
| Support GVRP (VLAN registration protocol) |
| Support MAC VLAN, IP VLAN |
| Support Voice VLAN |
| MAC address | Support MAC address automatic learning and aging |
| Support Static, dynamic, filtered address table |
| Security Feature | Password protection |
| Support Restrict user access based on port number, IP address, MAC address |
| Support HTTPS, SSH V1/V2 |
| Support VLAN-IP-MAC-PORT binding |

|  |  |
| --- | --- |
|  | Support ARP detection, IP source protection, DoS protection |
| Support DHCP Snooping, DHCP Attack protection |
| Support 802.1X Certification |
| Support AAA (Authentication, Authorization, Accounting), Support RADIUS protocol, TACASC+ |
| Support Port security, port isolation |
| Access Control | Support L2(Layer 2)～L4(Layer 4) Packet filtering function |
| Support Port mirroring, flow rate limiting, QoS remarking |
| QOS | Support 8 ports queues |
| Support Port priority, 802.1P priority, DSCP priority |
| Support Port priority, 802.1P priority, DSCP priority |
| STP | Support STP(IEEE 802.1d), RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) protocol |
| Support Multi-instance, Support Aggregate interface |
| Support BPDU protection |
| Multicast | Support IGMP v1/v2/v3 Snooping |
| Support MLD v1/v2 Snooping |
| Support Layer 2 multicast fast leave mechanism, querier |
| Support Layer 2 IPv4 static multicast |
| Support Layer 2 IPv6 static multicast |
| Support IGMP v1/v2/v3 Layer 3 multicast |
| Storm Suppression | Support multicast suppression |
| Support broadcast storm suppression |
| Support unknown unit-cast suppression |
| Loop Protection | Support loop protection |
| Link Aggregation | Support Static Aggregation |
| Support LACP Dynamic Aggregation |
| Support based on IP, MAC, mixed load-balancing modes |
| Maximum support 8 aggregation groups (8 ports per aggregation group) |
| IPv6 | Support IPv6 Ping, IPv6 Traceroute, IPv6 Telnet |
| Support IPv6 SSH |
| Support IPv6 HTTP, IPv6 HTTPS |

|  |  |
| --- | --- |
| Management & Maintenance | Support WEB Management (HTTP、HTTPS) |
| Support CLI (Telnet, SSH V1/V2, Local serial port) |
| Support SNMP V1/V2/V3 |
| Support RMON V2 |
| Support LLDP Device discovery |
| Support SNTP Time synchronization |
| Support CPU Monitoring, Memory Monitoring |
| Support System log, classification warning |
| Support Ping, Trace route detection, cable detection |

# 【Panel Description】



**【Structure Size Drawing】**

