20 Port Gigabit Managed Ethernet PoE Switch

# 【Product Description】

SY-16G2G2SMP is 20-Ports Gigabit Managed PoE Switch . It adopts High-Quality and High-Speed Network IC and the most stable PoE Chip. The PoE port meets the IEEE802.3af or IEEE802.3at standard. This model can provide seamless connection for 10/100/1000M Ethernet, and the PoE power port can automatically detect and power the powered devices that comply with the IEEE802.3af or IEEE802.3at standards. The Non-PoE devices are forcibly powered and only transmit data.

# 【Features】

* 16 x 10/100/1000Mbps auto-sensing PoE Ports, 2 x 10/100/1000Mbps Ethernet Uplink Ports, 2 x Gigabit SFP Uplink Ports, 1 x Console Port
* Support IEEE802.3/IEEE802.3i/IEEE802.3u/IEEE802.3ab/IEEE802.3z
* Compatible with IEEE802.3at (30W) and IEEE802.3af (15.4w)
* Ethernet port supports 10/100/1000M adaptive
* Panel indicator monitoring the status and help failure analysis
* Fanless design, Natural Cooling, 1U Rack Mount
* Support 802.1x port authentication, support AAA authentication, support TACACS+ authentication
* Support WEB, TELNET, CLI, SSH, SNMP, RMON management
* Support PoE Power Management, PoE watch dog
* Surge Protection: General 4KV, Differential 2KV, ESD 8KV air, 6KV contact

# 【Application Environment】

* Metropolitan area fiber broadband network: telecommunications, cable TV, network system integration, etc., network operators.
* Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
* Multimedia transmission: image, voice, data integrated transmission, suitable for remote teaching, conference TV, videophone and other applications.
* Real-time monitoring: simultaneous transmission of real-time control signals, images, data

# 【Technical parameters】

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| **Input/output Port** |
| AC INPUT | AC100-240V，50/60Hz |
| Ethernet Port | 16 \* 10/100/1000Mbps PoE Port 2\* 10/100/1000Mbps Uplink Port 2\* 1000Mbps SFP Port1 \* RJ45 Console Port |
| **Performance** |

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| Bandwidth | 40Gbps |
| Packet Forwarding rate | 29.76Mpps |
| DDR SDRAM | 128MB |
| Flash Memory | 16MB |
| Packet Buffer Memory | 4M |
| MAC Address | 8K |
| Jumbo frame | 9.6Kbytes |
| VLANs | 4096 |
| **Standard** |
| Network Protocols | IEEE 802.3：Ethernet MAC Protocol IEEE 802.3i：10BASE-T EthernetIEEE 802.3u：100BASE-TX Fast Ethernet IEEE 802.3ab：1000BASE-T Gigabit EthernetIEEE 802.3z：1000BASE-X Gigabit Ethernet (optical fiber)IEEE 802.3ad：Standard method for performing link aggregation IEEE 802.3x：Flow controlIEEE 802.1ab： LLDP/LLDP-MED (Link Layer Discovery Protocol)IEEE 802.1p：LAN Layer QoS/CoS Protocol Traffic Prioritization(Multicast filtering function) IEEE 802.1q：VLAN Bridge OperationIEEE 802.1x：Client/Server Access Control and Authentication Protocol IEEE 802.1d：STPIEEE 802.1s：MSTP IEEE 802.1w：RSTP |
| PoE protocol | IEEE802.3af （15.4 W） IEEE802.3at （30 W） |
| Industry Standard | EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD)、EN61000-4-4 (EFT)、EN61000-4-5 (Surge) |
| Network Media | 10BASE-T: Cat3、4、5 or above UTP(≤100 M)100BASE-TX: Cat5 or above UTP(≤100 M)1000BASE-TX: Cat5 or above UTP(≤100 M) |
| Fiber Medium | Multi-mode Fiber: 50/125、62.5/125、100/140um Single-mode Fiber: 8/125、8.7/125、9/125、10/125um |
| **Certification** |
| Safety Certificate | CE、RoHS |
| **Environmental standards** |

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| Working Environment | Operating temperature: -10~50°C Storage temperature: -40~70°COperating Humidity: 10%~90%, No condensation Storage Humidity: 5%~90%, No condensation |
| **Function indication** |
| Indicator | PWR, SYS, PoE/ACT, Link/ACT |
| PWR（Power Indicator） | Lighting：Powered Un-Light：No Power |
| SYS（System Indicator） | Flashing: System Start-up Lighting: System Running |
| PoE/ACT | Lighting：PoE on Un-Light：PoE off |
| Link/ACT | Lighting: Link connection Flashing: Data transmission Un-Light: Link disconnect |
| Reset | Short press restart, long press 5 seconds to restore factory Settings |
| **Physical specifications** |
| Product Information | Product Dimensions: 440\*204\*44mm Package Dimensions: 500\*290\*85mm Product N.W: 2.78KGProduct G.W: 3.44KG |
| Packing Information | Carton Dimensions: 520\*445\*310mm Packing Qantity: 5 pcsPacking weight: 18.2KG |
| Voltage | Input Voltage: AC100-240V/50-60Hz Power supply: 52V5.76A |
| Packing list | 1. Ethernet switch: 1 Set
2. Instruction manual: 1 PCS
3. Certificate, warranty card: 1 PCS
4. Power cord: 1PCS
5. Serial cable: 1PCS
6. Rack ear: 1 Pairs
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| **Order Information** |
| SY-16G2G2SMP | 20 Port Gigabit Managed Ethernet PoE Switch |

**【Software function】**

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| 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 / PoE Watchdog |
| Support PoE port power configuration |
| VLAN | Support 4K VLAN |
| Support 802.1Q VLAN，baesd on port VLAN |
| SupportAccess、Trunk、Hybrid VLAN mode |
| Support GVRP (VLAN registration protocol) |
| Support MAC VLAN 、IP VLAN |
| Support Voice VLAN |
| MAC | Support MAC address automatic learning and aging |
| Support Static, dynamic, filtered address table |
| Security features | 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 |
| SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal |
| Support Port security, port isolation |
| Access control | Support L2(Layer 2)～L4(Layer 4) Packet filtering function |

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|  | Support Port mirroring, flow rate limiting, QoS remarking |
| QOS | Support 8 port queues |
| Support Port priority, 802.1P priority, DSCP priority |
| Support SP, WRR Priority scheduling algorithm |
| Spanning tree | Support STP(IEEE 802.1d), RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) protocal |
| 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 unicast suppression |
| Ring protection | Support Ring 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 and 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 |

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|  | Support System log, classification warning |
| Support Ping, Traceroute detection, cable detection |
| Support WEB Management (HTTP、HTTPS) |

# 【Product Picture】





**【Product Structure】**

