

# 48 PORT 10/100/1000M 802.3af/at POE + 4 PORT 10G SFP+ MANAGED SWITCH (KL-S48P4S-GE)



#### **DESCRIPTION:**

The KL-S48P4S-GE is a 10G uplink layer two plus managed PoE switch. It has 48\*10/100/1000Base-T RJ45 ports and 4\*1/10G SFP+ fiber slot ports. Port 1-24 can support IEEE 802.3af/at standard PoE power supply. single port PoE power reaches 30W, and the maximum PoE output power is 600W. As a PoE power supply device, it can automatically detect and recognize the power receiving equipment that meets the standard and supply power through the network cable. It can supply power to POE terminal equipment such as wireless AP, webcam, VoIP phone, building visual access control intercom, etc. through a network cable to meet the network environment that needs high-density PoE power supply. It is suitable for hotel, campus, factory dormitory and small and medium-sized enterprise.

The KL-S48P4S-GE has the layer two plus full network management function, support IPV4/IPV6 management, static route full line rate forwarding, security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.

#### **PRODUCT DETAILS:**

- 48\*RJ45 10/100/1000M + 2\*10G SFP Port PoE Switch,1-48 ports support IEEE 802.3af/at;
- PoE port support AF/AT intelligent recognition. Standard power is 15.4W/port, Maximum power: 30W/port;
- Only support 1,2(+)/3,6(-);
- Support QOS, STP/RSTP, IGMP, DHCP, SNMP, WEB, VLAN, ERPS etc.;
- Switching capacity:56Gbps, MAC table:8K;
- POE port can be real-time network management, timed on/off, can force POE working mode, real-time display of POE port power;
- Compatible with 1U rack, built-in internal power adapter;

## **TECHNICAL SPECIFICATIONS:**

Model	KL-S48P4S-GE
Interface	48*10/100/1000Base-T PoE ports (Data/Power) 4*1/10G uplink SFP+ fiber slot ports (Data) 1*Console RS232 port (115200,N,8,1)
Managed Type	L2+
POE Port	Port 1-48 can support IEEE 802.3af/at PoE standard
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE802.3ae 10GBase-SR/LR IEEE802.3x
PoE Standard	IEEE802.3af/at international standard
Ethernet Port Feature	Port 1-48 can support 10/100/1000BaseT(X) auto detect, full/half duplex MDI/MDI-X adaptive
Fiber Port Feature	10G SFP fiber interface (Fiber module is not included, need to order separately, module options include single/multi-mode, single/dual fiber, LC)
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	598Gbps (non-blocking)
Forwarding Rate@64byte	107.14Mpps
MAC	32K
Buffer Memory	32M
Twisted Pair Transmission	10BASE-T:Cat3,4,5 UTP(≤100 meter) ; 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T:Cat5e or later UTP(≤100 meter)
Optical Fiber Cable	Multi-mode:850nm 0~300M(10G) ,850nm 0~500M (1.25G); Single-mode:1310nm 0~40KM,1550nm 0~120KM.
Power Supply Pin	Default: 1/2(+),3/6(-)
Max / Average Power Per Port	30W/15.4W
Total PWR / Input Voltage	600W (AC100-240V)
Power Consumption	Standby<35W;Full Load<600W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 6.6A
LED Indicator	Power indicator:PWR(yellow); system indicator:SYS(yellow); Network indicator;Link(yellow); PoE indicator: PoE (green); Fiber port indicator L/A(green)
Reset Button	Support one key to restore factory settings

Operation TEMP/Humidity	-20~+55°C;5%~90% RH Non condensing	
Storage TEMP /Humidity	-40~+80°C;5%~95% RH Non condensing	
Lightning protection / Protection Level	Lightning protection :4KV 8/20us; Protection Level:IP30	
Dimension (L*W*H)	440*290*44mm	
Net /Gross Weight	<4.9kg / <5.8kg	
Installation	Desktop, 19-inch 1U cabinet	
Lightning protection / protection level	Lightning protection: 4KV 8/20us; Protection level: IP30	
Warranty	3 years.	
Managed Series Feature		
Interface	IEEE802.3x flow control (full duplex) Broadcast storm suppression for port rate support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps. Temperature protection setting Energy saving configuration of port EEE Ethernet	
PoE Management	Total power limit of PoE power supply PoE output power allocation per port, close /af/at PoE output priority configuration for each port PoE working state display per port Power delay start PoE work and time scheduling	
Layer3 Function	Support L2+ managed function, Support IPV4/IPV6 management Support layer3 soft routing (weak three tier) forwarding, Support different network segments, communication between different VLAN Support static routing / default routing 128, 1024 ARP software forwarding	
VLAN	Support port based VLAN (4K), IEEE802.1q Support protocol based VLAN Support Access, Trunk, Hybrid three types of port configuration Support QinQ configuration	
Port Aggregation	Support LACP Support static polymerization Support the largest 8 aggregation groups, each aggregation group supports 8 ports.	
Spanning Tree	STP (IEEE802.1d) RSTP (IEEE802.1w) MSTP (IEEE802.1s)	
Industrial Ring Network Protocol	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring. The self-healing time of the ring network is less than 20ms	
Multicast	Support IGMP Snooping V1/V2 and support 1024 multicast groups at most. Support the user's quick departure mechanism Support MLD Snooping V1/V2	

	Support multicast VLAN
Image	Bi-directional traffic mirroring supporting the basic port
QoS	Diff-Serv QoS Each port supports 8 output queues Support 802.1p/DSCP priority mapping Support queue scheduling mechanism (SP, WRR, SP+WRR) priority tag Mark/Remark stream based packet filtering Support for stream based redirection Support flow based speed limit
ACL	Support L2 to L4 packet filtering function, can match the first 80 bytes of the message, provide based on the source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL. Support ACL based on port and VLAN
Safety Characteristics	Support user grading management and password protection Support IEEE802.1X authentication / centralized MAC address authentication Support AAA&RADIUS authentication Support the number of MAC address learning restrictions Support MAC address black hole Support SSH 2 to provide secure passwords for user login. Support SSL to ensure data transmission security Support port isolation Support the speed limit function of ARP message Support IP source address protection Support ARP intrusion detection function Support against DoS attacks Support port broadcast message suppression Support host data backup mechanism Binding capabilities of IP+MAC+VLAN+ ports
DHCP	Support DHCP Client Support DHCP Snooping Suport DHCP Serve Suport DHCP Relay
Management And Maintenance	Support Console/AUX Modem/Telnet/SSH2.0 CLI command line configuration Support WEB network management (HTTPS) Support FTP, TFTP, Xmodem, SFTP file download management Support SNMP V1/V2C/V3 Support one bond reduction Support NTP clock Support system work log Support Ping detection Support cable state detection Support CPU instant utilization status view Support link layer discovery protocol LLDP
System Requirements	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; Cat5e or later Ethernet cable; TCP/ IP, network adapter and network operating system (Microsoft Windows, Linux or Mac OS X) installed on on every computer in the network.

### **DIMENSIONS:**

