

48+4TF 10G uplink three-layer network managed POE switch



48 10/100/1000M POE network



4 1/10G uplink SFP+ optical port slots



1 Console management port

IPM-MANAGER-4800S



Specifications

Exchange

Packet forwarding rate: 131Mpps.

MAC address:32K

Jumbo

Network management

Input voltage: AC100-240V 50/60Hz, 500/800W

Dimensions: 440*290*45mm

Weight: 5kg

【Product Description】

IPM-MANAGER-4800S series 10G uplink three-layer network managed PoE switch, have 48 individual thousand megabit network ports, among which 1-48 ports support IEEE 802.3af/at standard PoE power supply, and the single-port PoE power reaches 30W. IPM-MANAGER-4800 All service ports support 4KV electrostatic lightning protection. As a PoE power supply device, it can automatically detect and identify powered devices that meet standards and power them through network cables. It can supply power to POE terminal equipment such as wireless AP, network camera, Internet phone, building visual access control intercom, etc. through the network cable. It meets the network environment that requires a high-density PoE power supply and is suitable for hotels, campuses, parks, supermarkets, banks, scenic spots, factory dormitories, and SMB small and medium-sized enterprises to build cost-effective networks.

IPM-MANAGER-4800S has L3 network management functions, supports IPV4/IPV6 static/dynamic route forwarding, supports complete security protection mechanisms, complete ACL/QoS policies, and rich VLAN functions, making it easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and ERPS (<20ms) ring network protocols to improve link backup and network reliability. When a one-way network fails, communications can be quickly restored to ensure important Transmission of uninterrupted communications. According to actual application needs, PoE power supply management, port flow control, VLAN division, QoS, LACP, IGMP DHCP, and other application service configurations are performed through network management methods such as Web, CLI, SNMP, and Telnet.

【Product Features】

- Single-port PoE power up to 30W, if/at adaptive, widely compatible with various network terminals, supports PoE network management, remote POE port restart, and real-time power status viewing.
- 4 optical ports uplink port, Optical fiber long-distance transmission, adapt to various ring network/chain network cascading and expansion make networking easier.
- Full Gigabit high-speed transmission, 10 Gigabit bandwidth uplink, high-bandwidth transmission is stable and guaranteed, supports per-port rate and flow control, and achieves 10M/250 meters long-distance transmission, easily solving long-distance communication and power supply problems, to meet different user needs.
- Enterprise-level high-bandwidth switching chips, high backplane, and large cache, reduce network congestion.
- Supports automatic learning and updating of MAC addresses, and automatic port flip (Auto MDI/MDI-X) function.
- The service port supports 4KV anti-surge (lightning protection) protection, PoE short circuit and overload protection, making it safer and more secure to use.;
- Fine steel forged metal shell, shielding interference, strong heat dissipation, strong, rust-proof and more durable;

【Software Features】

Strong business capabilities

- Supports 128 entries of IPV4/IPV6 static/dynamic routing, supports ARP protocol, maximum 1024 entries, and supports IPV4/IPV6 management.
- Flexible port bandwidth and traffic configuration, optical port DDMI digital diagnostic function, easily achieve refined network management.
- Supports IEEE 802.1Q VLAN, protocol VLAN, and Qin VLAN. Users can flexibly divide VLANs according to needs.
- Supports QoS, three priority modes based on port, 802.1P-based and DSCP-based, and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- Supports ACL to filter data packets by configuring matching rules, processing operations, and time permissions to provide flexible security access control strategies.
- Supports IGMP V1/V2/V3 multicast protocols and IGMP SnoopingV1/V2/V3 to meet multi-terminal high-definition video surveillance and video conferencing access requirements.
- Supports STP/RSTP/MSTP production tree protocol and ERPS fast ring network protocol to eliminate layer 2 loops and achieve link backup.
- Supports static aggregation and dynamic aggregation (LACP), effectively increasing link bandwidth, achieving load balancing, link backup, and improving link reliability.

Complete Security Features

- Support WEB interface user authentication
- Supports CPU protection to prevent attacks by large data flows on the switch itself.
- Support 802.1x authentication, Remote RADIUS, TACACS+ authentication
- Hardware supports IP ACL, MAC, ACLPort filtering function address binding, Port-based IP+MAC+Vlan+Port multiple binding function.
- Supports DHCP Snoopingv1/v2/v3 function, port isolation function, and port broadcast storm suppression function.

Convenient operation and maintenance management

- Supports diverse management and maintenance methods such as Web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), etc.
- Supports HTTP/HTTPS, SSH and other encryption methods, making management more secure.
- Supports HTTP/TFTP for firmware update/upgrade, supports configuration file

upload/download, and restores system configuration with one click.

- Supports RMON, system logs, and port traffic statistics to facilitate network optimization and transformation.
- Supports LLDP, which facilitates the network management system to query and determine the communication status of the link.
- Supports CPU monitoring, memory monitoring, Ping detection, and cable detection.

【Technical Specifications】

model		IPM-MANAGER-4800S
Port Characteristics		
fixed port	Downstream port	48 10/100/1000Base-T RJ45 network ports
	Upstream port	4 1/10G SFP+ optical port slots
	Management port	1 Console port (115200, 8, N, 1)
	PoE port	1-48 supports af/at standard PoE power supply, transmission distance 100-250 meters
Network port characteristics		1-48 mouths 10/100/1000M adaptive, full/half duplex MDI/MDI-X Adaptive
twisted pair transmission		10BASE-T: Cat3, 4, 5 UTP (≤250 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical port characteristics		Gigabit SFP Optical fiber interface is not equipped with optical modules by default and needs to be purchased separately (optional order mode/multi-mode, single fiber/double fiber optical modules, LC/SC)
Optical cable		Multimode: 850nm/0~550M, 50 μm/125 μm & 62.5 μm/125 μm Single mode: 1310nm/0~40KM, 1550nm/0~120KM. 9.5 μm/125 μm
Exchange chip parameters		
Network management type		L3 network management
Network protocol		IEEE802.3 10BASE-T; IEEE802.3i 10Base-T IEEE802.3u 100Base-TX IEEE802.3x Flow Control IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree protocol

	IEEE 802.1w Rapid Spanning Tree protocol IEEE 802.1s Multiple Spanning Tree protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN tagging IEEE 802.1x Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3af DTE Power via MDI IEEE 802.3at DTE Power via MDI
CPU	Dual core 1GMHz
DRAM	2Gbits
FLASH	256Mbits
Forwarding mode	Store and forward (full line speed)
Backplane bandwidth	216Gbps (non-blocking)
Packet forwarding rate@64byte	131Mpps
MAC address table	32K
Packet forwarding cache	16Mbits
jumbo frame	12Kbytes
indicator light	Power Indicator:PWR (Green); System running light: SYS (green); Network indicator: L/A (green), PoE indicator: PoE (yellow); Optical port indicator: SFP (green)
onekey reset switch	1, long press and release for 6 seconds to restore factory settings
MTBF	100,000 hours
POE and power characteristics	
POE port	Ports 1-48 support IEEE802.3af/at standard POE power supply
PoE management	Supports PoE on/off and restart for each port, PoE working status display for each port, real-time PoE power display for each port, timing scheduling function for each port
Power supply pin	Default 1/2(+), 3/6(-) 4-core power supply
Maximum PoE power of single port	30W, standard IEEE802.3af/at
Total power/input voltage	500W (AC100-240V)
Machine power consumption	Standby power consumption: <25W; full load power consumption: <500W
Supporting power supply	Built-in AC switching power supply AC: 100~240V 50-60Hz 6.0A
Physical specifications	

Operating temperature/humidity	-20° C~+55° C; 5%~90% RH non-condensing
Storage temperature/humidity	-40° C~+75° C; 5%~95% RH non-condensing
Appearance size (L*W*H)	440*290*45mm
Net weight/gross weight	<5kg / <5.5kg
Installation method	Desktop, rack mount
Certification and Warranty	
Lightning protection/protection level	Port lightning protection: 4KV 8/20us; protection level: IP30
Safety certification	CE, FCC, RoHS, CCC
Warranty	2Year
Software management features	
port	Support IEEE802.3x flow control (full duplex), half-duplex back pressure flow control Supports forced port mode and rate Support broadcast storm and port storm inhibition Supports port traffic rate limiting with a minimum granularity of 16Kbps, up to 1Gbps Support port real-time traffic management (Flow Interval) Supports jumbo frame size control, supporting up to 16K data packets Support optical port DDMI digital diagnostic function
IP routing	Supports L3 network management function, IPv4/IPv6 static/dynamic routing, and IPv4/IPv6 dual-stack management Support RIPv1/v2, RIPng Support OSPFv1/v2 Supports ARP protocol, maximum entries 1024
VLAN	Support port-based VLAN (4K), IEEE802.1q Supports protocol-based VLANs Supports VLAN based on MAC address Support Voice VLAN Supports three types of port configuration: Access, Trunk, and Hybrid Support QinQ configuration Support GVRP VLAN protocol
Port aggregation	Support static aggregation Supports static aggregation (LACP) Support maximum 26 Aggregation group, each aggregation group supports up to 8 ports

Ring network function	<p>Support loop protection function</p> <p>Support STP/RSTP/MSTP spanning tree protocol</p> <p>Supports ERPS ring network (single ring, multi-ring, intersecting ring and tangent ring configuration), the ring network self-healing time is less than 20ms</p>
multicast	<p>Support IGMP Snooping v1/v2/v3, supports up to 1024 multicast group</p> <p>Support multicast VLAN</p> <p>Support MVR (Multicast LAN Registration)</p>
mirror	<p>Supports bidirectional traffic mirroring of basic ports</p> <p>Supports bidirectional traffic mirroring of basic ports</p> <p>Supports 1-to-many mirroring</p> <p>Supports up to 4 port sessions</p>
QoS	<p>Supports priority based on port, 802.1P and DSCP/ToS, Supports 8 output queues per port</p> <p>Supports four priority scheduling modes: Equ, SP, WRR, and SP+WRR</p> <p>Support priority mark Mark/Remark</p> <p>Supports flow-based rate limiting, packet filtering, and redirection</p>
ACL	<p>Supports L2~L4 packet filtering function, which can match the first 80 bytes of the message and provide based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, and TCP/UDP port range, VLAN, etc. define ACL.</p> <p>Supports issuing ACL based on port and VLAN</p>
security features	<p>Support user hierarchical management and password protection</p> <p>Support port-based IEEE802.1X authentication</p> <p>Support AAA&RADIUS and TACACS+ Certification</p> <p>Supports MAC address learning number limit</p> <p>Supports MAC address blackhole and address binding</p> <p>Support SSH 2.0, providing secure encrypted channel for user login</p> <p>Support port isolation</p> <p>Support ARP message rate limiting function</p> <p>Support IP source address protection</p> <p>Support ARP intrusion detection function</p> <p>Support anti-DoS attack</p> <p>Support port broadcast message suppression</p> <p>Support host data backup/restore mechanism</p> <p>IP+MAC+VLAN+port four yuan Binding function</p>
DHCP	<p>Support DHCP Server</p> <p>Support DHCP Client</p> <p>Support DHCP Snooping v1/v2/v3</p>
Management and maintenance	<p>Supports diverse management and maintenance such as Web network management, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), etc. Support WEB network management (support HTTP/HTTPS)</p> <p>Support HTTP and TFTP file upload/download management</p> <p>Support RMON 1, 2, 3 and 9 groups</p>

	<p>Support one clickreset</p> <p>Support NTP clock and local clock</p> <p>support local log and System log (SYSLOG)</p> <p>Support Ping detection</p> <p>Support cable status check</p> <p>Supports real-time CPU utilization status viewing</p> <p>Supports link layer discovery protocol LLDP</p> <p>Supports unified management of NMS platform clusters (LLDP+SNMP)</p>
<p>System Requirements</p>	<p>Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher</p> <p>Category 5 and above Ethernet cables;</p> <p>TCP/IP network adapter and operating system (such as Microsoft Windows, Linux or Mac OS)</p>