

Full Gigabit 2 optical 16 electrical L2+ managed POE switch



Overview

| | |
|----------------------------------|---|
| Ports | 16*10/100/1000M RJ45 PoE Ports 2*1000M SFP |
| PoE Ports | 1-2 ports support IEEE802.3af/at/bt, Max 90W/port 3-16 ports support IEEE802.3af/at, Max 30W/port |
| Manage ports | 1 ↑ console port |
| Reset Key | 1 ↑ |
| PoE power supply polarity | Af/at/bt: 12+ 45+ ; 36- 78- Af/at: 12+ 36- |
| PoE total power | Max 300W |
| CPU | 500MHz |
| DDR | 1G DDR3 |
| FLASH | 128MBytes |
| RAM | 128MBytes |
| Band width | 56G/128Gbps |
| Packet forwarding | 41.67Mpps |
| MAC Address | 8K |
| Cache | 4.1 Mbit SRAM Packet Buffer |
| Jumbo frames | 10000Bytes |
| VLAN Address | 4K |
| Transmission distance | 10M: Cat3,4,5 UTP(≤250 Meters) 100M : Cat5 or later UTP(150 Meters) 1000M : Cat6 or later UTP(150 Meters) SFP: Supports 1000M single-mode and multi-mode optical modules, the maximum distance is ≤120km (depends on the optical module) |
| LED indicator light | PWR:power indicator light SYS: system indicator light 1-16:10/100、1000M Network connection indicator light 17-18: Optical port connection indicator light |
| Power supply | Built-in power supply AC: 100-240Vac 50-60Hz 3.8A Maximum 315W |
| Working | -10~+55°C; 5%~90% non-condensing |

| | |
|---|---|
| temperature/humidity | |
| Storage temperature/humidity | -40~+75°C; 5%~95% non-condensing |
| Product/package size (L*W*H) | 440mm*290mm*45mm 515mm*375mm*95mm |
| Net weight/gross weight (kg) | 3.2kg/4.0kg |
| Lightning/surge protection level | 6KV 8/20us; IP30 |
| Installation method: | Rack type (distributed rack mounting ear accessories) |
| Certification: | 3C; CE-EMC EN55032; CE-LVD EN62368; FCC Part 15 Class B; RoHS; |
| Warranty period: | 1 year for the whole machine (excluding accessories) |

| | |
|---|--|
| Features | L2+ Switch |
| Supported switch chips | RTL838X |
| Port | |
| Number of 100M ports | Maximum 48 ports |
| Number of Copper Gigabit ports | Maximum 48 ports |
| Number of Fiber Gigabit ports | Maximum 24 ports |
| Port Shutdown | Support |
| Port Speed | Support autonegotiate, full-1000, full-100, half-100, full-10, half-10 |
| Flow Control | support full-duplex IEEE 802.3x, half-duplex back pressure |
| Storm Control | Supports rate limit for broadcast, multicast, and DLF packets |
| Storm Constrain | Support the detection of broadcast packets, multicast packets, or unicast packets on the port, shutdown the port if the rate is over the threshold. |
| Port Mirror | Support |
| Port Rate Limit | Support port ingress and egress rate limit |
| Link Aggregation | Support manual link aggregation Support LACP dynamic link aggregation Supports up to 8 aggregation groups, each group up to 8 ports Support source MAC, destination MAC, source destination MAC, source IP, destination IP, source destination IP routing strategy |
| Port Isolate | Support |
| Jumbo Frame | Support up to 16KB packet |
| Cable Distance Diag | Support |

| | |
|-------------------------------------|---|
| Redundant Port | Support |
| The DDM of fiber ports | Support |
| MAC | |
| MAC Table Capacity | 8K |
| MAC Table Management | Support |
| Forwarding mode | Support IVL forwarding mode |
| Static MAC Address | Support |
| MAC Address Binding | Support |
| MAC Address Filtering | Support |
| MAC Learning Control | Control the MAC learning based on port |
| VLAN | |
| Number of VLANs | 4K |
| 802.1q-based VLAN | Support |
| MAC-based VLAN | Support |
| IP-based VLAN | Support |
| Protocol-based VLAN | Support |
| PVLAN | Support |
| Voice VLAN | Support |
| VLAN Mapping | Support 1:1 mapping |
| QinQ | Support basic QinQ Support flexible QinQ |
| Reliability | |
| Spanning Tree Protocol | Support STP/RSTP/MSTP |
| Port Loop Detection | Support |
| EAPS | Support RFC3619 |
| ERPS | Support G.8032/Y.1344 |
| LLDP | Support LLDP & LLDP-MED |
| UDLD | Fully compatible with CISCO's UDLD protocol |
| IP | |
| ARP | Support static and dynamic ARP |
| IP Route | Support 0.0.0.0/0 route and other static route, but can't support L3 forwarding |
| VLAN Interface | Support 32 VLAN interfaces |
| Multicast | |
| Static Multicast MAC Address | Support |
| IGMP SNOOPING | Support |
| MLD SNOOPING | Support |
| MVR | Support |

| | |
|------------------------------------|--|
| GMRP | Support |
| ACL | |
| Standard IP-based ACL | Support |
| Extended IP based ACL | Support |
| MAC IP-based ACL | Support |
| MAC ARP-based ACL | Support |
| IPv6-based ACL | Support |
| ACL Port Filtering | Support |
| Time-based ACL | Support |
| QoS | |
| Port Queue Number | 8 |
| Port Queue Scheduling Mode | Support WRR, SP, WFQ |
| Port-based Classification | Support |
| 802.1p-based Classification | Support |
| DSCP-based Classification | Support |
| ACL-based Classification | Support |
| QoS Policy | Support packets mapping to queue Support COS or DSCP Remarking Support rate limits of data flow Support data flow statistics Support mirroring of data flow |
| DHCP | |
| DHCPv4 Client | Support |
| DHCPv6 Client | Support |
| DHCP Snooping | Support |
| DHCP Relay | Support |
| DHCP Server | Support |
| DHCP option 82 | Support |
| Management | |
| CLI Management | Support Console, TELNET and SSH Support multiple TELNET connections based on IPv4 and IPv6 Support multiple SSH connections based on IPv4 and IPv6 Support running configuration rollback Support ZTP (Zero Touch Configuration) |
| WEB Management | Support |

| | |
|-----------------------------------|--|
| SNMP Management | Support SNMP v1, v2c, v3 Support SNMP TRAP Support lots of standard and private MIBs Support SNMP based on IPv4 and IPv6 |
| User Management | Support multiple user management |
| TACACS+ | support switch authentication via TACACS+ server remote username and password Support password encryption in PAP and CHAP mode Support TACACS+ server to authorize the switch's commands Support TACACS+ based on IPv4 and IPv6 |
| Log Management | Support local log management Support SYSLOG based on IPv4 and IPv6 |
| RMON | Support RMON 1, 2, 3 and 9 groups |
| Cluster Management | Support NDP Support NTDP Support manual and automatic joining of cluster groups Support cluster unified management |
| OAM | Support 802.3ah Support 802.1ag |
| Configuration File | Support TFTP transmission based IPv4 and IPv6 Support SFTP transmission based IPv4 and IPv6 Support SFTP Client and SFTP Server |
| Upgrade software | Support TFTP transmission based IPv4 and IPv6 Support SFTP transmission based IPv4 and IPv6 Support SFTP Client and SFTP Server |
| Clock Management | Support local clock management Support SNTP based IPv4 and IPv6 |
| Security | |
| Switch Management Security | Support enabling and disabling TELNET, SSH, WEB and SNMP services Support TELNET, SSH, WEB and SNMP services to bind to standard IP ACLs Support for limiting the number of TELNET connections |
| CPU Protection | The switch's own security protection prevents large data streams from attacking the switch itself. |
| AAA | Support 802.1x Support RADIUS Supports authentication, authorization, and accounting through RADIUS server Support port-based and MAC-based 802.1x Support 802.1x guest VLAN |

| | |
|--------------------------------------|---|
| IP MAC Binding | Support static configuration of IP, MAC and port binding |
| DHCP SNOOPING | Support dynamic ARP binding to prevent ARP spoofing Support dynamic IP, MAC and port binding Support fixed port to connect to DHCP server to prevent private connection to DHCP server |
| Prevent ARP Spoofing | Support manually configuring MAC ARP-based ACL rules to prevent ARP spoofing. Support the DHCP SNOOPING function. During the process of obtaining an IP address by DHCP, the switch dynamically binds ARP to the port to prevent ARP spoofing. |
| PoE | |
| Supported PoE chips | MAX5980,LTC4259,LTC4271,TPS23851,TPS23861,TPS23880,TPS23881,IP808,PD69100/69108,PD69200/69208, etc. |
| Switch Control | Support PoE powering of ports on and off |
| Power Control | Support setting total power |
| Other Advanced Features | Support PoE scheduling policy and PD online query, etc. |
| IPv6 | |
| IPv4/IPv6 Dual Protocol Stack | Support |
| IPv6 Address | Support manual address configuration, stateless address auto-configuration and stateful address configuration obtained through DHCPv6 client |
| IPv6 Neighbor Discovery | Support |
| ICMPv6 | Support |
| IPv6 Path MTU Discovery | Support |
| Debugging | |
| PING | Support |
| PING6 | Support |
| TRACEROUTE | Support |
| TELNET Client | Support TELNET client based IPv4 and IPv6 |
| SSH Client | Support SSH client based IPv4 and IPv6 |
| TWAMP | Support TWAMP server and session-reflector |