

Full Gigabit 2 optical 24 electrical L2+ managed switch



Overview	
Ports	24*10/100/1000M RJ45 network ports 2*100/1000M SFP ports
Manage ports	1 console port
Reset key	1 pc
CPU	500MHz
DDR	1G DDR3
Flash	128MBytes
Ram	128MBytes
bandwidth	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 ≤ 120 km (depends on the optical module)
LED indicator light	PWR: power indicator light SYS: system indicator light 1-24: 10/100, 1000M network connection indicator light 25-26: Optical port connection indicator light
Power supply	Built-in power supply AC: 100-240Vac 50-60Hz 0.3A Max. 25W
Working temperature/humidity	-10 \sim +55 $^{\circ}$ C; 5% \sim 90% non-condensing

Storage temperature/humidity	-40~+75°C; 5%~95% non-condensing
Product/package size (L*W*H)	440mm*200mm*45mm 515mm*300mm*95mm
Net weight/gross weight (kg)	2.1kg/2.8kg
Lightning/surge protection level	6KV 8/20us; IP30
Installation method:	rack type (rack mounting ear accessories are delivered)
Certification	3C; CE-EMC EN55032; CE-LVD EN62368; FCC Part 15 Class B; RoHS;

Features	L2+ Switch
Supported switch chips	RTL838X
Port	
Number of 100M ports	Maximum 24 ports
Number of Copper Gigabit ports	Maximum 24 ports
Number of Fiber Gigabit ports	Maximum 2 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

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