ALPHA BRIDGE- LAYER 2 Switch (AS200/12/S4/XF)

Supports Max. 8 10GE/GE SFP+ Ports.

Advanced Hardware Architecture and Industry-leading Port Density.

Carrier-Grade, High Reliability, Layer-3 Routing Functions.

Verified Service characteristics, Versatile IPv6 solution, Complete Security Mechanism.

Product Description

AS200/12/S4/XF from Anqixin is a L3 managed switch equipped with 8 10Gbps SFP+ fiber ports.

With abundant L3 management features supported, the AQX-M3XF8-S is capable of deliv- ering high throughput to even the most demanding edge-of-network workgroups, while in small networks it can act as a backbone for Gigabit switches and high-speed servers.

The AS200/12/S4/XF is designed exclusively for the networking needs of growing business- es, with an extensive suite of management and security features available. These devic- es are cost-effective for small and medium-sized businesses, providing ideal solutions for a variety of network scenarios.

Product Specifications

8 x10G SFP+ Ports L3 Managed Switch (AS200/12/S4/XF)

1. 8 10Gbps SFP+ fiber ports.
2. Support IEEE 802.1Q VLAN, QoS, ACL, SSL.
3. Support Spanning Tree, Multicast IPV6, SNMP.
4. Support 802.1X certification.
5. Support ERPS ring network.
6. Support RSTP/MSTP spanning tree.
7. Supports Port Security, Port Monitoring, and Port Isolation.
8. Support Quaternary binding, ARP/ IP/DoS protection.

Features

- Supports IEEE 802.3i, 802.3u, 802.3ab, 802.3, 802.3x , 802.3az, 802.3z.
- Provides 8 10Gbps SFP+ fiber ports.
- Supports MAC address auto-learning and auto-aging.
- Store and forward mode operates.
- LED indicators for monitoring power, link/activity.
- Supports QoS, port mirroring, link aggregation protocol.
- Full metal iron shell

Energy saving and low noise

- Following the IEEE 802.3 az (Energy Efficient Ethernet) standard, it greatly reduces the power consumption of the equipment and is green and energy-saving.

- Fully considering the low noise requirements of the user environment, the fanless design is adopted to monitor the temperature in the system in real time, which can effectively reduce noise pollution.

Strong business process capability

- With IEEE 802.1Q VLAN support, the VLANs can be flexibly partitioned according to your needs.
- Supports voice VLAN, configure QoS parameters for voice data streams, enhance the transmission priority of voice data streams, and ensure call quality.
- Supports QoS, three priority modes based on Endpoint, 802.1P and DSCP, and four queue scheduling algorithms: Equ, SP, WRR and SP+WRR.
- Supports ACL, according to configure matching rules, processing actions, and tem- poral permissions to filter packets, and provide flexible security access control poli- cies.
- Supports IGMP V1/ V2 multicast protocol and IGMP Snooping for multi-terminal HD video surveillance and video conference access.
- Supports multicast VLAN and multicast filtering for efficient data transmission, saving network bandwidth and reducing network load.
- Supports port monitoring by copying a copy of the monitored port's packets to the monitoring port to enable network monitoring.

Complete security protection mechanism

- Supports quadruple binding of IP address, MAC address, VLAN, and port to filter packets.
- It supports ARP protection against ARP spoofing and ARP flooding attacks, such as grid spoofing and intermediary attacks, which are common in local area networks.
- Supports IP source protection to prevent illegal address spoofing including MAC spoofing, IP spoofing, and MAC/IPspoofing.
- Supports 80 2.1 X authentication, which provides authentication for local grid computers and controls the authorization status of the controlled endpoints based on the authentication results.
- Supports port security and stops learning when the maximum number of MAC addresses is reached to prevent MAC address attacks and control the flow of the port network.

Diverse reliability protection

- Supports STP/RSTP/MSTP spanning tree protocols, eliminating layer 2 loops and enabling link backup.
- Supports spanning tree security to prevent all forms of malicious attacks on devices in the spanning tree network.
- Static and dynamic aggregation are supported to effectively increase link bandwidth, achieve load balancing, link backup, and improve link reliability.

Easy operation and maintenance

- It supports a variety of management and maintenance methods such as Web-based management, CLI commands (Console, Telnet), and SNMP (V1/V2/V3).
- Supports HTTPS, SSL V3,TLSV1, SSHV1/V2 encryption for more secure management.
- RMON, system logs, and end-to-end traffic statistics for network optimization and transformation.
- Supports cable detection, Ping detection, and Tracert detection to easily analyze the faulty network nodes.
- LLDP is supported to facilitate the network management system to query and judge the communication status of the link.
- Supports CPU monitoring, memory monitoring, operations and time permissions, and provides a flexible access control strategy.

Product Specifications

Item	AS200/12/S4/XF
Power Supply	AC 100-240V 50/60HZ
Standards	IEEE 802.3,802.3i,802.3u,802.3ab,802.3x,802.3az,802.3z
Ports	8 x 10Gbps SFP+ fiber ports,1x Console port
Indicators	8 link/act indicators, power input indicator,
	system operation indicator.
Network Media (Cable)	10Base-T: UTP category 3, 4, 5 cable (Max100m) 100Base-Tx: UTP category 5, 5e cable (Max100m) 1000Base-T: UTP category 5e, 6 cable (Max100m)
Dimensions	10GBase-T:UTP category 6A cable (Max100m)
Transfer	195*165*40 mm
Method	
MAC Address Table	Store-and-Forward
Switching Capacity	16K
Packet	160Gbps
Forwarding Rate	
Packet	119.04Mpps
Buffer	12Mbit
Jumbo	12KBytes
Frame	Operating Temperature: 0 ℃ ~45 ℃ (0°F~113°F) Storage Temperature: -40 ℃ ~70 ℃ (-40°F ~158°F)
	Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~95% non-condensing
Environment	AC 100-240V 50/60HZ
Power Supply	IEEE 802.3,802.3i,802.3u,802.3ab,802.3x,802.3az,802.3z

Product Features

VLAN	QoS	Reliability
• Surveillance VLAN • 16 OUI Mode (Auto/Manual)Voice VLAN • 16 OUI Mode (Auto/Manual) • QinQ (IEEE 802.1ad)- Basic • GARP VLAN Registration Protocol (GVRP) • 4096 Static VLAN/Port-based • IEEE 802.1Q Tagged-based • 8 groups Protocol- based • 256 MAC-based	• Trusted QoS/Priority 8 Queue • Queue Scheduling • WRR • WFQ • Strict Pripor/ty • Hybrid(WRR+SP or WFQ+SP) • Class of Service • Port-based • 802.1p • IP TOS Precedence • IP DSCP • Rate Limit	Static/LACP link Aggregation, Interface backup, EAPS and ERPS, ISSU uninterrupted system upgrade, BVSS virtual stacking, URPF, LLDP, VRRP, 1+1 power backup

- Port-based (Ingress/Egress)

L3 Switching Features	Security	Discovery
• Static Routing- IPv4/IPv6 • Address Resolution Protocol (ARP)- Static ARP	• AAA Authentication • 8 TACACS+ • 8 RADIUS • Authentication Manager • IEEE 802.1X • MAC Auth • Web Auth • Guest VLAN • Port-based • Host-based • Account Manager • Local Authenticatoin • 8 Multiple User Account • Multi-Level Securiy (Manager/Operator)	• IEEE 802.1AB Link Layer Discovery Protocol (LLDP) • ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

MIB	Security (cont.)	Diagnostics
• RFC1213 MIBII (System & Interface groups) • RFC2819 RMON I (1,2,3, & 9 groups) • RFC1215 Generic Traps • RFC1493 Bridge • RFC2674 Bridge MIB Extensions • RFC2737 Entity • RFC3635 Ethernet-Like • RFC2863 Interface Group • SNMP-Community-MIB • SNMPv3-MIB	• Password Recovery Procedures • Management Access • Management VLAN • 256Management ACL • SSL • SSLv2 • SSLv3 • TLSv1 • WebUI- HTTPS • CLI- SSH v1/v2 • Port Security- 256 Dynamic Lock • Storm Control • Broadcast • Unknown Multicast • Unknown Unicast • Spanning Tree • BPDU Guard • Protected Port (Port Isolation) • Black Hole MAC • CPU Defence Engine • DoS Prevention • DHCP Snooping (with Option 82) • Dynamic ARP Inspection • 256 IP Source Guard • IP/MAC/Port Binding (IMPB) • Dynamic VLAN Assignment	• UDLD • Mirroring- 4 sessions port-based (Many to One) • Syslog (RFC3164) • Local RAM • Local Flash • 8 Remote Server • System Diagnostics • CPU Utilization • Memory Utilization • Port Utilization • Technical Support Log • Port Diagnostics • Cable Test • Fiber Module Status • Network Diagnostics • Ping Test • Traceroute

L2 Switching Features	Access Control List (ACL)	Multicast
• 16K MAC Address Table • 12K Jumbo Frame • Flow Control • 802.3x (Full-duplex) • Back-Pressure (Half-duplex) • Spanning Tree • IEEE 802.1D (STP) • IEEE 802.1w (RSTP) • IEEE 802.1s (MSTP)/16 instances • Auto Edge Port • BPDU Filtering • ERPS • Link Aggregation • IEEE 802.3ad LACP • Static Trunk • Max 8 Group • Max 8 Ports/Group • Traffic Load Balancing	• ACL Type- L2/L3/L4 • 512 MAC-based • 512 IPv4-based • 512 IPv6-based • Access Rules- 1024	• Common • 256 Multicast Groups • Immediate Leave • Static/Forbidden Router Port • Static/Forbidden Forward Port • 128 profiles Filtering • Throttling • IGMP Snooping • IGMP v1/v2 • IGMP v3 Basic (BISS) • IGMP v2/v3 Querier • MLD Snooping- MLD v1/v2 • Multicast VLAN Registration (MVR)- IPv4

IPv6	Environment	Management
- IPv6 Host - Auto Configuration - Static IPv6 Address and Prefix Length - Static IPv6 Default Gateway - IPv6 Neighbor Discovery (ND) - IPv6 Duplicate Address Detection - ICMPv6 - IPv6 Application - HTTP/HTTPS - TELNET - SSH - SNMP - TFTP - Syslog - PING - DHCPv6	Operating temperature/humidity: 0°C to 50°C, 10%-90% non-condensing Storage temperature/humidity: (-20°C to 70°C), 5%- 95% non-condensing	- CLI 3 sessions Console 3 sessions Telnet (RFC854) - WebUI - HTTPS - SNMP(v1,v2c,v3) - File Management - Firmware Upgrade/Backup - Dual Images - Configuration Download/Backup - Multiple Configurations - Upload/Download - TFTP (RFC783) - HTTP - UART - Time Management - Local - SNTP - Port Management - Friendly Port Name (Port Description) - Error Disabled Recovery - Line Management - Console - Telnet (RFC854) - SSH v1/v2 - DHCP- Client - DNS- Client - Software Reset Button - IEEE (802.3az) 32 entries / type RMON Management

Ordering Information

Item	Description
AS200/12/S4/XF	8 x 10GE SFP+ ports, AC220V single power supply, the cooling fan, 1U, 19-inch rack-mounted installation)