



AirPro 10G Layer 2+ Switch

AP-SGXQ7200-24X2Q-R1

- 24x10GbE (SFP+) + 2x40GbE(QSFP).
- 1console, 1USB, 1reset, 1RJ45 management port.
- AC + 48VDC power supply.
- Switching capacity: 640Gbps.
- Forwarding rate: 480Mpps.

OVERVIEW

Accomplished via a hot-pluggable 10 Gigabit SFP+ transceiver which supports distance up to 300 meters over multimode fiber and 10 to 40km over single-mode fiber (The distance depends the optical module chosen).

AP-SGXQ7200-24X2Q-R1 supports built-in redundant AC and DC power supplies for different environment applications.

Easy high reliability network

Virtual Switch Framework (VSF) could virtualized multiple AirPro switches into one logical device, achieves the sharing of information and data tables between different switches. The performance and ports density of virtualized device are greatly enlarged by times under VSF. VSF also provides simplified management work for network administrator and more reliability.

G.8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. AP-SGXQ7200-24X2Q-R1 supports G.8032 v2 and can be deployed in a variety of complex network topologies including single ring, tangent ring, intersecting rings, double rings and other home networking.

Multi-process MSTP. When a new access ring can be implemented through creating a new process of MSTP, the new ring does not affect the existing traffic. And each process may run different spanning tree protocol.

AirPro EMVTE technology (Enhanced Multi-VLAN subnet Traffic Engineering) is a multi-link backup and load balancing solution based on multiple VLAN subnets for dual homing network. It can achieve faster switching and convergence of the uplink through ULPP (Uplink Protection Protocol) and ULSM (Uplink State Monitor) protocol so that network performance is guaranteed.

Enhanced Security

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based RADIUS server.

Ingress/Egress Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers information. And for some services are based on time, the product can support time based ACL to match the requirement.

AP-SGXQ7200-24X2Q-R1 support **DHCP snooping**, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrust ports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently.

AP-SGXQ7200-24X2Q-R1 supports much more L2 security features such as ARP guard, Anti-ARP scanning, and other ARP and MAC Security technology to protect network security and reliability.

Abundant Multicast Features

AP-SGXQ7200-24X2Q-R1 also supports MVR (Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons. With MVR Trunk function, which could associate multicast VLAN to trunk port, AP-SGXQ7200-24X2Q-R1 combines the VLAN data into the same link, saving lots of resources for users.

AP-SGXQ7200-24X2Q-R1 could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated to multicast devices.

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TECHNICAL SPECIFICATIONS

Item		AP-SGXQ7200-24X2Q-R1
Management Port		1 Console, 1 USB, 1 RJ45 management port
Ports		24x10GbE (SFP+) + 2x40GbE (QSFP) (each 40GbE(QSFP) can be divided 4 10GbE (SFP+) Auto-MIDX
Performance		
Switching Capacity		640Gbps
Forwarding Rate		480Mpps
MAC ADDRESS		32K
Jumbo Frame		12K
ACL Table		3K (ingress) + 1K (egress)
Queues per port		8
VLAN TABLE		4K
Physical		
Dimension (W×H×D)		440mm x 43.6mm x 318mm
Power Input		AC: 100~240VAC, 50~60Hz DC: Input -60V ~ -40V
Power Consumption		<70W
Temperature		Working 0°C~50°C, Storage -40°C~70°C
Relative Humidity		10%~90%,non-condensing
EMC safety		CE, RoHS
Main Features		
Forwarding		Storage and Forwarding
VLAN		Port-based VLAN IEEE802.1Q Private VLAN Protocol VLAN Voice VLAN MAC VLAN Normal QinQ, Flexible QinQ VLAN Translation
DHCP		IPv4/IPv6 DHCP Client, IPv4/IPv6 DHCP Relay Option 82 IPv4/IPv6 DHCP Snooping, IPv4/IPv6 DHCP Server
Reliability	Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP Root Guard, BPDU Guard, BPDU Forwarding Multi-Process MSTP
	LACP	128 groups per device/8 ports per group Load balance
	L2 Ring Protection	MRPP ERPS(G.8032) Loopback Detection Fast Link
	Multi-link Backup	Enhanced Multi-VLAN subnet Traffic Engineering (ULPP+ULSM)
	VSF	Virtual Switch Framework

TECHNICAL SPECIFICATIONS

Item	AP-SGXQ7200-24X2Q-R1
Security	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL Time Range ACL, VLAN ACL Storm Control based on packets and bytes Port Security, MAC Limit based on VLAN and Port Anti-ARP-Spoofing , Anti-ARP-Scan, ARP Binding ND Snooping, DAI IEEE 802.1x Authentication, Authorization, Accounting Radius, TACACS+
Multicast	IGMP v1/v2/v3 snooping, IGMP Fast leave MVR MLD v1/v2 snooping IPv4/IPv6 DCSCM(D)
QoS	8 Queues Per Port Bandwidth Control Flow Redirect Classification based on ACL, VLAN ID, COS, TOS, DSCP, IPv6 Flow Label Policing Based on Port and VLAN Single Rate Three Colors, Dual Rates Three Colors for Policing Remark DSCP, COS/802.1p, Precedence, TOS SP, WRR, SWRR, WDRR for Scheduling
Maintenance and Operation Management	XModem/TFTP/FTP CLI, Telnet, Console Web/SSL (IPv4/IPv6) SSH (IPv4/IPv6) SNMPv1/v2c/v3 SNMP Trap Public & Private MIB interface RMON 1,2,3,9 Ping, Trace Route Radius Authentication Syslog (IPv4/IPv6) SNTP/NTP (IPv4/IPv6) Dual IMG, Multiple Configuration Files Port Mirror, CPU Mirror, RSPAN sFlow OAM EFM; OAM CFM Dying GASP DDM ULDP (like Cisco UDLD) LLDP/LLDP MED
Green Energy	Auto Fan Speed Control, Temperature Alarm LED Shut-off



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