

100G Ethernet Routing Switch

PRODUCT OVERVIEW

AirPro AP-SG6200-24XF2Q is a L3 stackable routing switch series with 100GE fiber uplink ports. AP-SG6200-24XF2Q has advanced hardware and software architecture design, built-in dual redundant power supplies. AP-SG6200-24XF2Q provides high availability, scalability, security, energy efficiency, and ease of operation with innovative features such as VSF (Virtual Switch Framework) and 3 fixed Auto-adjusted fan units. It is ideal for high-density aggregation in Enterprise networks or Campus networks.

For SMB, AP-SG6200-24XF2Q could be used as core switch.



MAIN FEATURES

- 24x10GE(SFP+) + 2x100GE(QSFP28).
- 1 modular AC+1 optional modular AC power supply.
- 1 console, 1 USB, 1 RJ45 management port.
- 1 Rest Button.
- Forwarding performance: 488Mpps.
- Switching capacity: 656Gbps.
- Auto MDI/MDIX.

KEY FEATURES AND HIGHLIGHTS

VSF (Virtual Switch Framework)

Virtual Switch Framework can virtualize multiple AirPro switches into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of the virtualized device is greatly enlarged by times under VSF. VSF also simplifies management work for the network administrator and provides more reliability.

Rich L3 Features

AP-SG6200-24XF2Q delivers high-performance, hardware-based IP routing. RIP, OSPF, and BGP provide dynamic routing by exchanging routing information with other Layer 3 switches & routers. With AP-SG6200-24XF2Q, customers could easily achieve a Policy-based Route (PBR), which is important when they need a multi exit application.

Strong Multicast

AP-SG6200-24XF2Q supports abundant multicast features. In Layer 2, such as IGMPv1/v2/v3 snooping and fast leave. L3 multicast protocols such as IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM, and even MSDP. With Multicast VLAN Register (MVR), multicast receiver/sender control and illegal multicast source detect functions; AP-SG6200-24XF2Q provides a great application experience for the customer.

Easy High-Reliability network

G.8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. SG6200 series support 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.

Comprehensive QoS

With 8 queues per port, AP-SG6200-24XF2Q enable differentiated management of up to 8 traffic types. The traffic is prioritized according to IEEE802.1p, DSCP, IP precedence, and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video. AP-SG6200-24XF2Q also supports Bi-directional rate-limiting, per port or traffic class preserves network bandwidth, and allows full control of network resources.

Enhanced Security

IEEE 802.1X port-based access control and MAC-based access control ensure all users are authorized before being granted access to the network.

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 that are based on time, the product can support time-based ACL to match the requirement.

Secure Shell (SSH) encrypts network management information via Telnet providing secure network management. RADIUS Authentication enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-SG6200-24XF2Q	
Physical port	24x10GE(SFP+) + 2x100GE(QSFP28)	
Management port	1 x RJ45 Ethernet Management port 1x Console port 1x USB2.0 interface	
Performance		
Switching Capacity	656Gbps	
Forwarding Rate	488Mpps	
Jumbo Frame	16K	
MAC Address	96K	
ARP Table	16K	
Routing Table	32K	
ACL Table	1K	
L3 Interface	Max 1K	
Physical		
Dimension (W*H*D)	440mm x 44mm x 420mm	
Relative Humidity	5%~90% non-condensing, storage 95%	
Temperature	Working 0°C~50°C, storage -40°C~70°C	
Power Supply	1 modular AC + 1 optional AC (100~240VAC, 50~60Hz)	
Power Consumption	<85W	
Main Features	<ul style="list-style-type: none"> Port loopback detection LLDP and LLDP-MED UDLD 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk LACP load balance 	
L3 Features	<ul style="list-style-type: none"> N:1 Port Mirroring RSPAN ERSPAN 	
	<ul style="list-style-type: none"> IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP) Root Guard BPDU Guard 	
	<ul style="list-style-type: none"> 802.1Q, 4K VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ GVRP Broadcast / Multicast / Unicast Storm Control 	
	<ul style="list-style-type: none"> IGMP v1/v2/v3 Snooping and L2 Query IGMP Proxy ND Snooping MLDv1/v2 Snooping 	
	<ul style="list-style-type: none"> Port Security 	
	<ul style="list-style-type: none"> Flow Control: HOL, IEEE802.3x Bandwidth Control 	
	L3 Features	<ul style="list-style-type: none"> Static Routing, RIPv1/v2, OSPFv2, BGP4 OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and Ipv6 VRRP URPF, ECMP BFD
		<ul style="list-style-type: none"> DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP Static Multicast Route Multicast Receive Control Illegal Multicast Source Detect
<ul style="list-style-type: none"> ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit Anti ARP/NDP Cheat, Anti ARP/NDP Scan 		
<ul style="list-style-type: none"> DNS Client, DNS Relay 		
<ul style="list-style-type: none"> ICMPv6, ND, DNSv6 		
IPv6	<ul style="list-style-type: none"> IPv6 Policy-based Routing (PBR) IPv6 VRRPv3, IPv6 URPF, IPv6 RA RIPng, OSPFv3, BGP4+ MLD Snooping, IPv6 Multicast VLAN MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS 	

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Item	AP-SG6200-24XF2Q
QoS	8 Queues SWRR, SP, WRR, WDRR, SWDRR Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number Traffic Policing PRI Mark/Remark
ACL	IP ACL, MAC ACL, IP-MAC ACL Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS REDIRECT and Accounting based ACL Rules can be configured to port, VLAN Time Ranged ACL
Security	802.1x AAA Port, MAC-based authentication Accounting based on time length and traffic Guest VLAN and auto VLAN
	RADIUS for IPv4 and IPv6
	TACACS+ for IPv4 and IPv6
	MAB
DHCPv4/v6 Traffic Monitor	DHCP Server/Client for IPv4/IPv6 DHCP Relay/Option 82 DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Network Management	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6 Syslog and external Syslog Server HTTP SSL SNMP MIB, SNMP TRAP FTP/TFTP SNTP/NTP RMON 1,2,3,9 Authentication by Radius/TACACS SSH v1/v2 Dual firmware images/ Configuration files 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)

ORDER INFORMATION

Product	Description
AP-SG6200-24XF2Q	100G Ethernet Routing Switch, 24x10GE (SFP+) + 2x100GbE (QSFP28), AC + 1 optional AC power supply

www.airpronetworks.com

All specifications in this document are subject to change without notice. AirPro products are sold with a limited warranty described at: www.airpronetworks.com
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