# DATASHEET AP-SG6200-24XF2Q

# **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 sup plies. 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 net-work administrator and provides more reliability.

#### **Rich L3 Features**

AP-SG6200-24XF2Q delivers high-performance, hard-ware-based IP routing. RIP, OSPF, and BGP provide dy-namic 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 dif-ferentiated 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 in-formation via Telnet providing secure network man-agement. RADIUS Authentication enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch.



Simple | Secure | Trusted



## **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	880Gbps
	655Mpps
Forwarding Rate	
Jumbo Frame	16K
MAC Address	96K
ARP Table	16K
Routing Table	32K
ACL Table	1Κ
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	
L3 Features	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   N:1 Port Mirroring   RSPAN   ERSPAN   IEEEE802.1d(STP)   IEEEE802.1d(STP)   IEEEE802.1w(RSTP)   Root Guard   BPDU Guard   802.10, 4K VLAN   MAC VLAN, Voice VLAN, Protocol VLAN, Multicast VLAN   QinQ, Selective QinQ, Flexible QinQ   GVRP   Broadcast / Multicast J Unicast Storm Control   IGMP v1/v2/v3 Snooping and L2 Query IGMP Proxy   ND Snooping   MLDv1/v2 Snooping   MLDv1/v2 Snooping   Port Security   Fow Control: HOL, IEEE802.3x

## **PRODUCT SPECIFICATIONS** Hardware Specifications



Item	AP-SG6200-24XF2Q
	Static Routing, RIPv1/v2, OSPFv2, BGP4
	OSPFv3, BGP4+
	OSPF multiple processes
	Policy-based routing (PBR) for IPv4 and Ipv6
	VRRP
	URPF,
	ECMP
L3 Features	BFD
	DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP
	Static Multicast Route
	Multicast Receive Control
	Illegal Multicast Source Detect
	ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit
	Anti ARP/NDP Cheat, Anti ARP/NDP Scan
	DNS Client, DNS Relay
	ICMPv6, ND, DNSv6
	IPv6 Policy-based Routing (PBR)
Inve	IPv6 VRRPv3, IPv6 URPF, IPv6 RA
lpv6	
	RIPng, OSPFv3, BGP4+
	MLD Snooping, IPv6 Multicast VLAN
	MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS
	8 Queues
	SWRR, SP, WRR, WDRR, SWDRR
QoS	Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number
	Traffic Policing
	PRI Mark/Remark
	IP ACL, MAC ACL, IP-MAC ACL
	Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port,
ACL	DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS
	REDIRECT and Accounting based ACL
	Rules can be configured to port, VLAN
	Time Ranged ACL
	802.1x AAA
Security	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	DHCP Server/Client for IPv4/IPv6
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Traffic Monitor	DHCP Relay/Option 82
	DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6
	Syslog and external Syslog Server
	HTTP SSL
	SNMP MIB, SNMP TRAP
Security Network	FTP/TFTP
Management	SNTP/NTP
, manugunent	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



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