## **DATASHEET**

AP-SG4500-12GT-4XFP



# L2+10G Intelligent Access Switch 8 x 10/100/1000Base-T + 4 x 10GE(SFP+)

## **QUICK OVERVIEW**

AirPro AP-SGS4500 series is L2 10G uplink intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (Dynamic VLAN, Voice VLAN, Q-in-Q, N:1 VLAN Translation etc.), Ethernet Ring Protection Protocol (G.8032), classified bandwidth control, intelligent security control, OAMOperations, Administration and Maintenance), manageability functions and Triple-Play services which fulfill the network requirements demanded by carrier network, MAN access. SG4500 Series switch offers green features like Fan-less design feature, which can dramatically lower power consumption, achieve green energy and save the cost for the carrier and MAN users.

SG4500 series is equipped with the full GE ports and 4 SFP+ uplink ports, it integrates advanced management and security functions to provide performance and scalability.

## **FEATURES**

- 8 x 10/100/1000Base-T + 4 x 10GE(SFP+).
- 1 Console, 1 USB port.
- AC power supply.
- Switching capacity: 96Gbps.
- Forwarding rate: 71.4Mbps.

## 10G Uplink Access Switch:-

Equipped with the full GE ports and 4 SFP+ uplink ports, AP-SG4500 Series provides a solid foundation and more than enough bandwidth for your business applications today and in the future.

#### L3 Forwarding:-

AP-SG4500 Series supports L3 forwarding allowing you to segment your network into workgroups and communicate across VLANs without degrading application performance.

## 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.





### **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.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets and forward by different policies. User-defined ACL provides more flexible access control for users.

AP-SG4500 Series supports DHCP snooping, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrustports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently.

AP-SG4500 Series supports abundant L2 security features such as ARP guard, Anti-ARP scanning, and other ARP and MAC Security technology to protect network security and reliability.

### **High Reliability:-**

AP-SG4500 Series supports 4 10G uplink ports, which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of the network.

G.8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. AP-SG4500 Series 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.

#### **Abundant Multicast Features:-**

AP-SG4500 Series also supports MVR (Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons. With the MVR Trunk function, which could associate multicast VLAN to trunk port, AP-SG4500 Series combines the VLAN data into the same link, saving lots of resources for users.

AP-SG4500 Series could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated with multicast devices.

## **TECHNICAL SPECIFICATIONS**

hardware features		
Item	AP-SG4500-12GT-4XFP	
Ports	8 x 10/100/1000Base-T + 4 x 1/10GE(SFP+) Auto-MIDX	
Management port	1x Console port 1x USB2.0 interface	
Performance		
Switching Capacity	96Gbps	
Forwarding Rate	71.4Mbps	
MAC ADDRESS	16K	
Jumbo Frame	10K bytes	
Packet Buffer	12MBits	
ACL Table	512	
Queues per port	8	
VLAN TABLE	4K	



Main Features		
Forwarding	Storage and Forwarding	
VLAN	Port-based VLAN, IEEE802.1Q, private VLAN, Protocol VLAN, Voice VLAN,	
	MACVLAN	
	Normal QinQ, Flexible QinQ	
	VLAN Translation, N:1 VLAN Translation	
L3 Features	Static Routing, PBR	
DHCP	IPv4/IPv6 DHCP Client, IPv4/IPv6 DHCP Relay	
	Option 82, Option 37/38	
	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, TCN filtering	
LACP	64 groups / 8 ports	
L2 Ring Protection	MRPP	
	ERPS (G.8032)	
	Loopback Detection	
	Fast Link	
hardware features		
	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL	
	Time Range ACL	
	ACL rules can be configured to port, VLAN	
	Storm Control based on packets	
	Port Security, MAC Limit based on VLAN and Port	
Security	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 Proxy, IGMP v3	
	MLD v1/v2 snooping	
	8 Queues Per Port	
	Bandwidth Control	
	Flow Redirect	
QoS	Classification based on ACL, VLAN ID, COS, TOS, DSCP,	
	Policing Based on Port and VLAN	
	Single Rate single barrel double color for Policing	
	SP DWRR SDWRR, SP+DWRR for Scheduling	
	Match the IP fragmentation of a message	
	March the It, Haginentation of a message	



Maintenance and	TFTP/FTP	
Operation	CLI, Telnet, Console	
Management	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, RSPAN	
	Sflow	
	OAM EFM	
	VCT, DDM	
	ULDP (like Cisco UDLD)	
	LLDP/LLDP MED	
Green Energy	Fanless	Auto-speed fan
DataCenter Features	VSF(Virtual Switch Framework) (only 28 & 52 po	orts of models)

# **ORDER INFORMATION**

Product	Description
AP-SG4500-12GT-4XFP	L2+ Full Gigabit Access Switch with 8* 10/100/1000Base-T and 4* 10GE(SFP+)
	ports, static routing, 1 fixed AC power



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