Overview

AirPro AP-SG4500 series is full GbE standalone switches provide enterprise-class access for campus and branch applications. These fully managed switches can provide advanced Layer 2 features as well as optional Power over Ethernet Plus (PoE+) power. Designed for operational simplicity to lower total cost of ownership, they enable scalable, secure, and energy-efficient business operations with intelligent services.

Appearance	Description
AP-SG4500-10GT-2SFP	● 8x10/100/1000Base-T+2x100/1000Base-X (SFP) ● 1 console, 1 reset port ● AC power supply ● Switching capacity: 20Gbps ● Forwarding rate: 14.88Mpps
AP-SG4500-28GT-4SFP	● 24x10/100/1000Base-T+4x100/1000Base-X (SFP) ● 1 console, 1 reset port ● AC power supply ● Switching capacity: 56Gbps ● Forwarding rate: 41.7Mpps
AP-SG4500-52GT-4SFP	● 48x10/100/1000Base-T+4x100/1000Base-X (SFP) ● 1 console, 1 reset port ● AC power supply ● Switching capacity: 104Gbps ● Forwarding rate: 77.4Mpps

Key Features and Benefits

Green Energy

AP-SG4500 series comply with **IEEE 802.3az** (Energy-Efficient Ethernet) standard, dramatically lower power consumption With **Innovative port-LED Shut-off** function, the user can automatically set the switch port-LED UP or DOWN at a specified time period according to their needs to achieve functional, energy-saving correct results.

Full account of low noise requirements of the environment, AP-SG4500 uses **Fanless Design and Smart fan** strategies to real-time temperature monitoring system, and reduce the noise pollution.

Enhanced Security

AP-SG4500 series provide a variety of security mechanisms like SYN Flood, Land, ICMP Flood attack prevention and other DOS class technology, BPDU Guard and Root Guard which avoid accidental topology loops and prevent illegal edge devices become root to cause unnecessary flapping.

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 (**ACL**s) 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 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-SG4500 series support 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.

High Reliability

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

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

Abundant Multicast Features

AP-SG4500 series also support **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-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 to multicast devices.

Product Specifications

AP-SG4500-Series

Item	AP-SG4500-52GT-4SFP	AP-SG4500-28GT-4SFP	AP-SG4500-10GT-2SFP
Ports	48 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP)	24 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP)	8 x 10/100/1000Base-T + 2 x 100/1000Base-X (SFP)
Performance			
Switching Capacity	104Gbps	56Gbps	20Gbps
Forwarding Rate	77.4Mpps	41.7Mpps	14.88Mpps
MAC ADDRESS	16K	16K	8K
Jumbo Frame	12K	12K	10K
ACL Table	2048	2048	1408
Queues per port	8	8	8
VLAN TABLE	4K	4K	4K
Physical			
Dimension (W×H×D)	442mm x 220mm x 43.6mm	442mm x 220mm x 43.6mm	220mm x 160mm x 44.3mm
Power Input	100~240VAC, 50~60Hz	100~240VAC, 50~60Hz	100~240VAC, 50~60Hz
Power Consumption	40W	20W	7W
Cooling	Active	Passive	Passive
Temperature	Working 0°C~50°C, Storage -40°C~70°C		
Relative Humidity	5%~95%, 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, Selective QinQ, Flexible QinQ VLAN Translation, N:1 VLAN Translation		
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		
	LACP 16 groups / 8 ports		8 groups / 8 ports
	L2Ring Protection MRPP ITU-T G.8032 Loopback Detection Fast Link		
Security	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL Time Range ACL ACL on VLAN interface 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		

Item	AP-SG4500-52GT-4SFP	AP-SG4500-28GT-4SFP	AP-SG4500-10GT-2SFP
	MLD v1/v2 snooping IPv4/IPv6 DCSCM		
QoS	8 Queues Per Port Bandwidth Control Flow Redirect Classification based on ACL, VLAN ID, COS, TOS, DSCP, Policing Based on Port and VLAN Single Rate single barrel double color for Policing Remark DSCP, COS/802.1p, Precedence, TOS SP, WRR, SWRR, WDRR for Scheduling Match the IP fragmentation of message		
Maintenance and Operation Management	TFTP/FTP CLI, Telnet, Console, Reset 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 (SG4500-28P/52P) OAM EFM VCT, DDM ULDP(like Cisco UDLD) LLDP/LLDP MED		
Green Energy	IEEE 802.3az (Energy Efficient Ethernet) Fanless (10P and 28P) LED Shut-off		

Order Information

Product	Description
AP-SG4500-52GT-4SFP	L2 Gigabit Intelligent Ethernet Switch with 48 10/100/1000Base-T and 4 100/1000Base-SFP ports, 100-240VAC Power Input
AP-SG4500-48GT-4SFP	L2 Gigabit Intelligent Ethernet Switch with 24 10/100/1000Base-T and 4 100/1000Base-SFP ports, 100-240VAC Power Input
AP-SG4500-10GT-2SFP	L2 Gigabit Intelligent Ethernet Switch with 8 10/100/1000Base-T and 2 100/1000Base-SFP ports, 100-240VAC Power Input