

L2 Fully Managed PoE Switch

24 x 10/100/1000Base-T PoE + 4 x 100/1000 Base-X (SFP)

PRODUCT OVERVIEW

AP-SG4500-28GT-P-4SFP is L2 gigabit uplink intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (Dynamic VLAN, Voice VLAN, QinQ, N:1 VLAN Translation etc), Ethernet Ring Protection Protocol (G.8032), classified bandwidth control, intelligent security control, OAM(Operations, Administration and Maintenance), manageability functions and Triple-Play services which fulfill the network requirements demanded by carrier network, MAN access. AP-SG4500-28GT-P-4SFP 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.

AP-SG4500-28GT-P-4SFP is equipped with the full GE ports and 4 SFP uplink ports it integrates advanced management and security functions to provide performance and scalability.



MAIN FEATURES

- 24Ports 100/1000Mbps PoE with 4*1G Uplink Ports + 1 Console Port
- Power Budget 370W
- PoE/PoE+
- Switching Capacity 56Gbps
- Packet Forwarding 41.6Mpps
- Jumbo Frame
- MAC Address 16K
- Support Cloud Management

KEY FEATURES AND HIGHLIGHTS

L3 Forwarding

AP-SG4500-28GT-P-4SFP 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-SG4500-28GT-P-4SFP 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-SG4500-28GT-P-4SFP 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-SG4500-28GT-P-4SFP supports 4*1G 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-SG4500-28GT-P-4SFP 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-SG4500-28GT-P-4SFP 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-SG4500-28GT-P-4SFP combines the VLAN data into the same link, saving lots of resources for users.

AP-SG4500-28GT-P-4SFP could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated with multicast devices.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-SG4500-28GT-P-4SFP	AP-SG4500-28GT-P-4SFP
Ports	24x10/100/1000Base-T +4x100/1000Base-X (SFP) Auto-MIDX 1x Console port 1x USB2.0 interface	24x10/100/1000Base-T PoE +4x100/1000Base-X (SFP) Auto-MIDX 1x Console port 1x USB2.0 interface
Performance		
Switching Capacity	56Gbps	56Gbps
Forwarding Rate	41.7Mbps	41.7Mbps
MAC ADDRESS	16K	16K
Jumbo Frame	10K bytes	10K bytes
Packet Buffer	12M Bites	12M Bites
ACL Table	512	512
Queues per port	8	8
VLAN TABLE	4K	4K
Physical		
Dimension (W×H×D)	4440mm x 43.6mm x160mm	440mm x 43.6mm x 260mm
Power Input	100~240VAC, 50~60Hz	100~240VAC, 50~60Hz
Power Consumption	< 20W	< 450W with full PoE output
Cooling	Passive	Active
Temperature Working	0°C~50°C, Storage -40°C~70°	Working 0°C~50°C, Storage -40°C~70°
Relative Humidity	5%~95%, non-condensing	5%~95%, non-condensing
EMC Safety	CE, RoHS	CE, RoHS
PoE	NA	IEEE 802.3af POE (15.4W) IEEE 802.3at POE+ (30W) PoE output 370w
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, 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
	L2 Ring Protection	64 groups / 8 ports Protection ITU-T G.8032 Loopback Detection Fast Link
Multicast	IGMP v1/v2/v3 snooping, IGMP Proxy, IGMP v3 MLD v1/v2 snooping	
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	

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Hardware Specifications

QoS	<p>8 Queues</p> <p>SWRR, SP, WRR, WDRR, SWDRR</p> <p>Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number</p> <p>Traffic Policing</p> <p>PRI Mark/Remark</p>
ACL	<p>IP ACL, MAC ACL, IP-MAC ACL</p> <p>Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS</p> <p>REDIRECT and Accounting based ACL</p> <p>Rules can be configured to port, VLAN, VLAN routing interfaces</p> <p>Time Ranged ACL</p>
Security	<p>802.1x AAA</p> <p>Port, MAC based authentication</p> <p>Accounting based on time length and traffic</p> <p>Guest VLAN and auto VLAN</p> <p>RADIUS for IPv4 and Ipv6</p> <p>TACACS+ for IPv4 and Ipv6</p> <p>MAB</p>
DHCPv4/v6 Traffic Monitor	<p>DHCP Server/Client for IPv4/IPv6</p> <p>DHCP Relay/Option 82</p> <p>DHCP Snooping/Option 82</p>
Traffic Monitor	sFlow Traffic Analysis
Security Network Management	<p>CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6</p> <p>Syslog and external Syslog Server</p> <p>HTTP SSL</p> <p>SNMP MIB, SNMP TRAP</p> <p>FTP/TFTP</p> <p>SNTP/NTP</p> <p>RMOM 1,2,3,9</p> <p>Authentication by Radius/TACACS</p> <p>SSH v1/v2</p> <p>Dual firmware images/ Configuration files</p> <p>802.3ah OAM, 802.1ag OAM</p>
Data Center Features	VSF(Virtual Switch Framework)

PRODUCT INFORMATION

Product	Description
AP-SG6500E-8G24XF2Q	40G Ethernet Routing Switch, 8 x 10/100/1000Base-T (RJ45) + 24 x 10GE (SFP+) + 2 x 40GbE (QSFP+), AC + 48VDC power supply

