DATASHEET

AP-SG4500-28GT-P-4XFP-R2

Air Pro®

Simple | Secure | Trusted

SG4500 Series 10G uplink L2+ Switch

PRODUCT OVERVIEW

AP-SG4500 is L2 10G uplink intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (Dynamic VLAN, Voice VLAN, QinQ, N:1VLAN 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. 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 is equipped with the full GE ports and 4 SFP+ uplink ports. It integrates advanced management and security functions to provide performance and scalability.

KEY FEATURES AND HIGHLIGHTS

10G Uplink Access Switch:-

Equipped with the full GE ports and 4 SFP+ uplink ports, AP-SG4500-28GT-P-4XFP-R2 provides a solid foundation and more than enough bandwidth for your business applications today and in the future.

L3 Forwarding:-

AP-SG4500-28GT-P-4XFP-R2 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-4XFP-R2 supports 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-SG4500-28GT-P-4XFP-R2 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-4XFP-R2 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-SG4500-28GT-P-4XFP-R2 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-4XFP-R2 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-4XFP-R2 combines the VLAN data into the same link, saving lots of resources for users.

AP-SG4500-28GT-P-4XFP-R2 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-SG4500-24GT-4XFP	AP-SG4500-28GT-P-4XFP-R2	AP-SG4500-52GT-4XFP
Ports		24 x 10/100/1000Base-T + 4 x 1/10GE(SFP+) Auto-MIDX	24 x 10/100/1000Base-T PoE+ 4 x 1/10GE(SFP+) Auto-MIDX	48 x 10/100/1000Base-T + 4 x 1/10GE(SFP+) Auto-MIDX
Management port		1x Console port 1x USB2.0 interface 1x Reset key	1x Console port 1x USB2.0 interface 1x Reset key	1x Console port 1x USB2.0 interface 1x Reset key
Performance				
Switching Capacity		128Gbps	128Gbps	176Gbps
Forwarding Rate		95Mpps	95Mpps	131Mpps
MAC ADDRESS		16K	16K	16K
Jumbo Frame		10K bytes	10K bytes	10K bytes
Packet Buffer		12MBits	12MBits	24MBits
ACL Table		512	512	512
Queues per port		8	8	8
VLAN TABLE		4000	4000	4000
Physical				
Dimension(W×H×D)		440mm x 44mm x 170mm	440mm x 44mm x 300mm	440mm x44mm x280mm
Power Input		100~240VAC, 50~60Hz (Single Power)	100~240VAC, 50~60Hz (Dual Power AC/AC)	100~240VAC, 50~60Hz
Power Consumption		21W	<420W	<50W
Cooling		Passive	Active	Active
Temperature		Working 0°C~50°C, Storage -40°C~70°C	Working 0°C~50°C, Storage -40°C~70°C	Working 0°C~50°C, Storage -40°C~70°C
Relative Humidity		5%~95%, non-condensing	5%~95%, non-condensing	5%~95%, non-condensing
EMC Safety		CE, RoHS	CE, RoHS	CE, RoHS
PoE		NA	IEEE 802.3af POE (15.4W) IEEE 802.3at POE+ (30W) PoE output 370w	NA
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		
	LACP	64 groups / 8 ports		
	L2 Ring Protection	MRPP ERPS (G.8032) Loopback Detection Fast Link		
Security		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 Anti-ARP-Spoofing, Anti-ARP-Scan, ARP Binding ND Snooping DAI IEEE 802.1x Authentication, Authorization, Accounting Radius, TACACS+		

PRODUCT SPECIFICATIONS

Hardware Specifications

Item		
Multicast	IGMP v1/v2/v3 snooping, IGMP Proxy, IGMP v3 MLD v1/v2 snooping	
QoS	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	
Maintenance and Operation Management	TFTP/FTP CLI, Telnet, Console Free Cloud Managed 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

ORDER INFORMATION

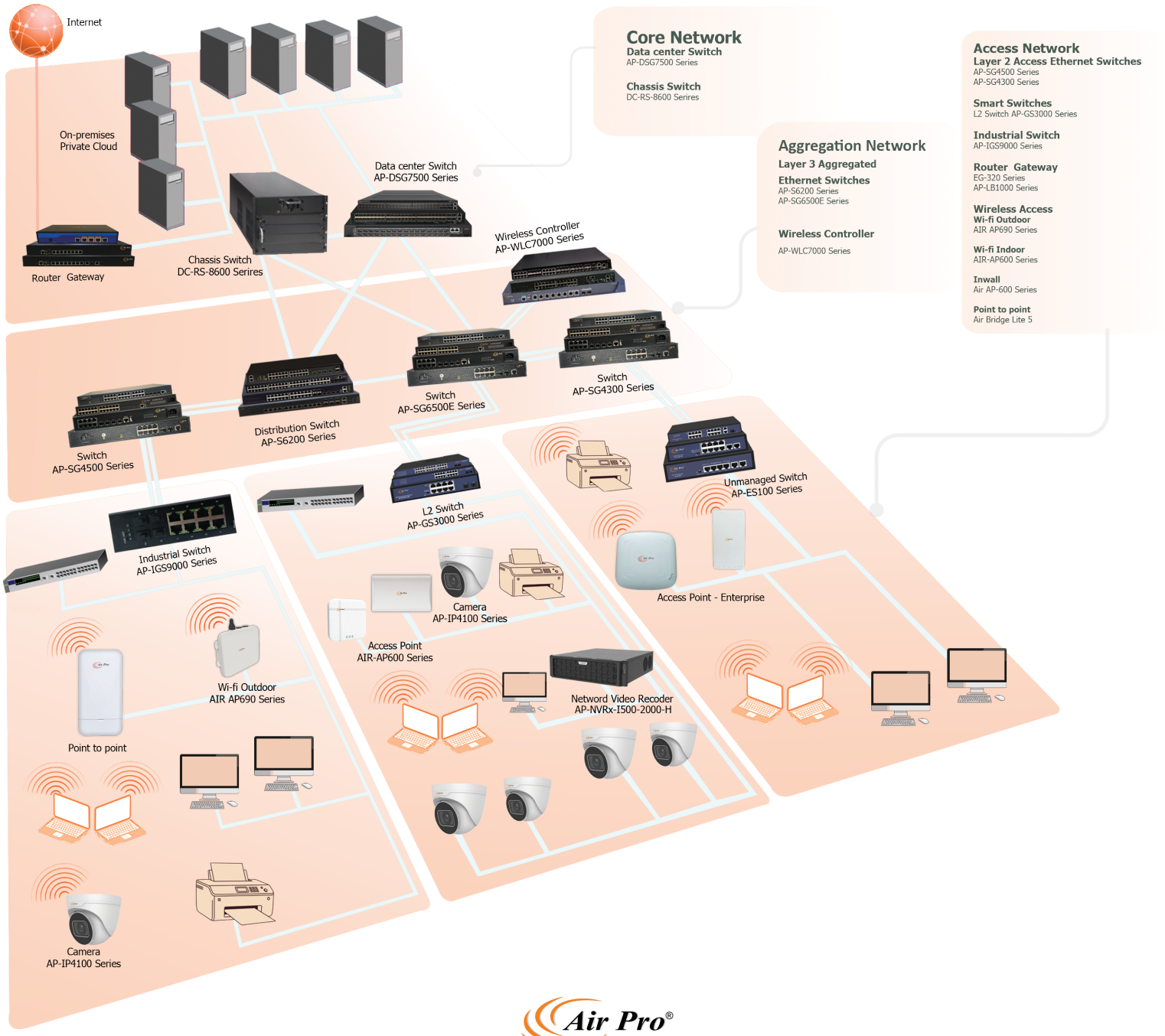
Product	Description
AP-SG4500-24GT-4XFP	L2+ Full Gigabit Access Switch with 24 10/100/1000Base-T and 4 10GE(SFP+) ports, static routing, 1 fixed AC power
AP-SG4500-28GT-P-4XFP-R2	L2+ Full Gigabit Access Switch with 24 10/100/1000Base-T PoE and 4 10GE(SFP+) ports, static routing, 2 fixed AC power, PoE output up to 370w
AP-SG4500-52FT-4XFP	L2+ Full Gigabit Access Switch with 48 10/100/1000Base-T and 4 10GE (SFP+) ports, static routing, 1 fixed AC power

END TO END SOLUTIONS

AirPro provides a complete end-to-end enterprise networking solutions covering core, aggregation, access, and wireless layers. With a comprehensive portfolio including data center switches, access and industrial switches, routers, wireless controllers, and Wi-Fi solutions, AirPro enables seamless wired and wireless integration. These layered architecture ensures high availability, scalability, and centralized management, making it ideal for campus, enterprise, and multi-site deployments.

Key highlights include:

- Complete portfolio covering core, aggregation, access, and wireless layers.
- Seamless integration of wired and wireless networks.
- Centralized management for simplified operation and deployment.
- Scalable architecture suitable for enterprise and campus networks.



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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