DATASHEET
AP-SG6500M-30X-P-4XP2Q

Air Pro®
Simple | Secure | Trusted

10G PoE Routing Switch Datasheet V15

AP-SG6500M-30X-P-4XP2Q	M6750-AC-B
	
• 24 x 100/1000M/2.5GBaseT + 4 x 10GE(SFP+) + 2 x 40G(QSFP+) ports. • 1 console, 1 USB, 1 reset, 1 RJ45 Management port • PoE / PoE+ /PoE++(60w) up to 530w with 1 PSU and 1060w 2 PSUs. • Modular Power supply, standard 1 AC. • Forwarding performance: 267.84Mpps • Switching capacity: 360Gbps. • RAM / Flash: 2GB / 2GB	• Maximum consumption: 600w. • AInput voltage: 90Vac~264Vac @ 47Hz ~ 63Hz. • Maximum input current:4.25A@220Vac; 8.5A@110Vac. • Output Voltage: +54.5VDC. • Maximum output current: 11.0A.

PRODUCT OVERVIEW

AP-SG6500M-30X-P-4XP2Q full 2.5G routing PoE switch provides high availability, scalability, security, energy efficiency, and ease of operation with rich features such as VSF(Virtualized Switching Framework), IEEE 802.3at/ IEEE 802.3bt and redundant power supplies. It is ideal for WiFi6 AP access scenes in campus networks.

KEY FEATURES AND HIGHLIGHTS

Ready for Wi-FI 6

AP-SG6500M-30X-P-4XP2Qhas 24 2.5Gbps ports and also supports Power over Ethernet (PoE), includ-ing PoE+ and 60W PoE. Certainly it is good for 802.11ac and 802.11ax wireless LAN applications and helps you avoid having to run multiple cables between switches and access points and let your networks wel-come next-generation traffic speeds and data rates.

Carrier-class reliability

AP-SG6500M-30X-P-4XP2Q provides 4 10 Gigabit and also 2 40G uplink ports which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of the network.
AP-SG6500M-30X-P-4XP2Q supports redundant hot-swappable power supplies and built-in lightning protection technology. All the ports provides 8KV-10KV lightning protection capability which greatly reduces the damage rate of equipment from lightning.
G.8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology.

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 virtualized devices is greatly enlarged by times un-der VSF. VSF also simplifies management work for the network administrator and provides more reliability.

Rich L3 Features

AP-SG6500M-30X-P-4XP2Q delivers high-performance, hardware-based IP routing, RIP, OSPF, and BGP provide dynamic routing by ex-changing routing information with other Layer 3 switches and routers. With AP-SG6500M-30X-P-4XP2Q, customers could easily achieve Policy-based Route (PBR), which is important when they need a multi exit application.

Strong Multicast

AP-SG6500M-30X-P-4XP2Q supports abundant mul-ticast 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-SG6500M-30X-P-4XP2Qprovides a great applica-tion experience for the customer. Comprehensive QoS With 8 queues per port, AP-SG6500M-30X-P-4XP2Q enable differentiated 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 ap-plications such as voice and video. AP-SG6500M-30X-P-4XP2Q also supports Bi-directional rate-limiting, per port or traffic class preserves network bandwidth, and allows full control of network resources.

Abundant IPv6 Support

AP-SG6500M-30X-P-4XP2Q supports IPv6 switching and routing based on hardware for maximum perfor-mance. With increased network devices growing the need for larger addressing and higher security become critical, AP-SG6500M-30X-P-4XP2Q will be the right product to meet this requirement.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-SG6500M-30X-P-4XP2Q
Physical port	24 x 100/1000M/2.5GBaseT PoE + 4 x 1GbE/10GbE(SFP+) + 2 x 40G(QSFP+) Auto MIDX
Management port	100/1000M BaseT RJ45 Ethernet Management port
	Console port (Rj45)
	Reset port
	USB2.0 interface
Performance	
Switching Capacity	360Gbps
Forwarding Rate	267.84Mpps
MAC Address	32K
Routing Table	16K
L3 Interface	Max 1K
Physical	
Dimension (W*H*D)	440mm*44mm*380mm
Relative Humidity	10%~90% non-condensing
Temperature	Working 0°C~45°C, storage-40°C~75°C
Power Supply	2 power slots, 1+1, Modular Redundant (standard with 1 AC), Hot-Swappable
PoE	IEEE 802.3af (15.4W) IEEE 802.3at (30W) IEEE 802.3bt (60W) (the first 8 ports) Total PoE power: 530W(1 PSU) or 1060W(2 PSUs)
Main Features	
L1, L2 Features	IEEE802.3(10Base-T), IEEE802.3u(100Base-TX), IEEE802.3z(1000BASE-X), IEEE802.3ab(1000Base-T), IEEE 802.3bz(2.5GBase-T), IEEE802.3ae(10GBase), IEEE802.3x, IEEE802.3ak(10GBASE-CX4), IEEE802.3ba(40GBASE-X)
	Port loopback detection IEEE 802.1AB (Link Layer Discovery Protocol LLDP and LLDP-MED) UDLD IEEE 802.3ad LACP, max 128 group trunks with max 16 ports for each trunk LACP load balance, Redundant Trunk Group (RTG) ERPS (G.8032)
	N:1 Port Mirroring RSPAN
	IEEEE802.1d(STP) IEEEE802.1w(RSTP) IEEEE802.1s(MSTP) Root Guard BPDU Guard BPDU Tunnel
	Jumbo frames 12000, IEEE 802.1Q, 4096 VLAN, Multiple VLAN Registration Protocol (MVRP)MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ GVRP N:1 VLAN Translation Broadcast / Multicast / Unicast Storm Control
	IGMP v1/v2/v3 Snooping and L2 Query ND Snooping MLDv1/v2 Snooping
	Port Security
	Flow Control: HOL, IEEE802.3x Bandwidth Control

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Hardware Specifications

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L3 Features	Static Routing, RIPv1/v2, OSPFv2, BGP4, IS-IS OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and Ipv6 VRRP, LPM Routing URPF, VRF ECMP BFD
	IGMP v1/v2/v3, IGMP Proxy, IGMP snooping 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 Cheat, Anti ARP Scan, Dynamic ARP inspection (DAI)
	DNS Client, DNS Relay
	ICMPv6, ND, DNSv6 IPv6 Policy-based Routing (PBR) IPv6 VRRPv3, IPv6 URPF, IPv6 RA RIPng, OSPFv3, BGP4+ MLD Snooping, IPv6 Multicast VLAN MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS
QoS	8 Queues, Ingress policing 2 rate 3 color, SP, WRR, SWRR, WDRR, SWDRR WRED, Hardware queues per port: 12 (8 unicast, 4 multicast) Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number Traffic Policing PRI Mark/Remark
ACL	IP ACL, MAC ACL, IP-MAC ACL Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS Redirect and Statistics Rules can be configured to port, VLAN Time Ranged ACL
Security	IEEE 802.1x AAA 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 DHCP Relay/Option 82 DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Network Management	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6 Syslog and external Syslog Server HTTP SSL SNMP MIB, SNMP TRAP FTP/TFTP SNTP/NTP RMOM 1,2,3,9 Authentication by Radius/TACACS SSH v1/v2 Dual firmware images/ Configuration files / Rollback file (Upto 50 recently files) 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)

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