DATASHEET
AP-SG6500M-18X-P-6XG

Air Pro®
Simple | Secure | Trusted

PoE Routing Switch Datasheet V15

PRODUCT OVERVIEW

AirPro-AP-SG6500M-18X-P-6XG full 10G(mGig) 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

- 12x1G/2.5G/5G/10GBaseT+6x10G/25GE(SFP28) ports
- 1 console, 1 USB, 1 reset, 1 RJ45 Management port
- PoE / PoE+ /PoE++ (90w) up to 370w
- 1 fixed AC & 48VDC RPS
- Forwarding performance: 405Mpps
- Switching capacity: 540Gbps

KEY FEATURES AND HIGHLIGHTS

Ready for Wi-FI 6

AP-SG6500M-18X-P-6XG has 12*10G/2.5G/5G/10Gbps ports and also supports Power over Ethernet (PoE), including PoE+ and PoE+ + (60W/90W). 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 welcome next-generation traffic speeds and data rates.

Carrier-class reliability

AP-SG6500M-18X-P-6XG provides 12*1G(mGig) ports and also 6 * 10G/25G uplink ports which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of the network.
All the ports on AP-SG6500M-18X-P-6XG provide 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 under VSF. VSF also simplifies management work for the network administrator and provides more reliability.

Strong Multicast

AP-SG6500M-18X-P-6XG supports abundant multicast 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-18X-P-6XG provides a great application experience for the customer.

Easy High Reliability network

MRPP is Multi-layer Ring Protection Protocol, which is AirPro private fast Ethernet ring protocol. Comparing to spanning tree protocol, it has advantages of fast convergence, simple protocol calculation, less system resources cost and so on, which can improve the reliability of Ethernet network operation.

Comprehensive QoS

With 8 queues per port, AP-SG6500M-18X-P-6XG 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 applications such as voice and video.
AP-SG6500M-18X-P-6XG 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-18X-P-6XG supports IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing the need for larger addressing and higher security become critical, AP-BSG6750M-18X-P-6XG will be the right product to meet this requirement.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-SG6500M-18X-P-6XG
Physical port	12 x 1G/2.5G/5G/10GBaseT + 6 x 10G/25G(SFP28)
	Auto MIDX
Management port	100/1000M BaseT RJ45 Ethernet Management port
	Console port (Rj45)
	Reset port
	USB2.0 interface
Performance	
Switching Capacity	540Gbps
Forwarding Rate	405Mpps
MAC Address	TBD
Routing Table	TBD
L3 Interface	Max 1K
Physical	
Dimension (W*H*D)	TBD
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)
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)
	Port loopback detection LLDP and LLDP-MED UDLD IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk LACP load balance ERPS (G.8032)
	N:1 Port Mirroring RSPAN
	IEEEE802.1d(STP) IEEEE802.1w(RSTP) IEEEE802.1s(MSTP) Root Guard BPDU Guard BPDU Tunnel
	IEEE 802.1Q, 4096 VLAN 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
L3 Features	Static Routing, RIPv1/v2, OSPFv2, BGP4 OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and Ipv6 VRRP
	URPF, ECMP BFD
	IGMP v1/v2/v3, IGMP Proxy,
	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
	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

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Hardware Specifications

QoS	8 Queues SP, WRR, SWRR, WDRR, SWDRR WRED 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 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)