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

# PoE Routing witch Datasheet V15

Simple | Secure | Trusted

## PRODUCT OVERVIEW

AirPro-AP-SG6500M-18X-P-6XG full 10G(mGig) routing oE switch provides high availability, scalability, security, energy efficiency, and ease of operation with rich eatures 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 Budget 530w with 1 PSU and 1060w 2 PSUs
- 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 ou avoid having tto run multipleables between switches and access points and let your networks welcome next-generation taffic 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 appli aations,ffeffeely raised the expansibility and performance of the network.

All the ports on AP-SG6500M-18X-P-6XG provide 8KV-10KV lightning protection apability 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 AIRP O switches into one logical device, achieving the sharing of information and d ta tables between different switches. The performance and ports density of virtualized devices is greatly enlarged by times under VS. VSF also simplifies management work for the network administrator and provides more reliability.

**Strong Multi ast**

AP-SG6500M-18X-P-6XG supports abundant multi ast features. In Layer 2, such as IGMPv1/v2/v3 snooping and fast leave. L3 multi ast protocols such as IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM, and even MSDP. With Multi ast VLAN Registter (MVR), multast receiver/sender control and illegal multi ast source dettect functions; AP-SG6500M-18X-P-6XG provides a great application xperience for the customer.

**Easy High Reliability network**

MRPP is Multi-l yer Ring Prottectionrotocol, 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 differenntted management of up to 8 traffic types. The traffic is prioritied according to IEEE802.1p, DSCP, IP precedence, and TCP/UDP port number, giving optimal perormance to rreal-time applications such as oice and video.

AP-SG6500M-18X-P-6XG also supports Bi-directional atte-limiti , 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 criti al, AP-SG6500M-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 | 32K |
| Routing able | 16K |
| L3 Interface | Max 1K |
| **Physical** | |
| Dimension (W*H*D) | TBD |
| Relati e 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),<br>IEEE802.3ab(1000Base-T), IEEE 802.3bz(2.5GBase-T), IEEE802.3ae(10GBase),<br>IEEE802.3x, IEEE802.3ak(10GBASE-CX4) |
| | Port loopback detection<br>LLDP and LLDP-MED<br>UDLD<br>IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk<br>LACP load balance<br>ERPS (G.8032) |
| | N:1 Port Mirroring<br>RSPAN |
| | IEEEE802.1d(STP)<br>IEEEE802.1w(RSTP)<br>IEEEE802.1s(MSTP)<br>Root Guard<br>BPDU Guard<br>BPDU Tunnel |
| | IEEE 802.1Q, 4096 VLAN<br>MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multi ast VLAN<br>QinQ, Selecti e QinQ, Flexible QinQ<br>GVRP<br>N:1 VLAN Translation<br>Broadcast / Multi ast / Unicast Storm Control |
| | IGMP v1/v2/v3 Snooping and L2 Query<br>ND Snooping<br>MLDv1/v2 Snooping |
| | Port Security |
| | Flow Control: HOL, IEEE802.3x<br>Bandwidth Control |
| L3 Features | Static Routi , RIPv1/v2, OSPFv2, BGP4<br>OSPFv3, BGP4+<br>OSPF multiple pocesses<br>Policy-based routing (PBR) or IPv4 and Ipv6<br>VRRP |
| | URPF,<br>ECMP<br>BFD |
| | IGMP v1/v2/v3, IGMP Proxy, |
| | DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP<br>Static Mult ast Route<br>Multi ast Receive Control<br>Illegal Multi ast Source Detect |
| | ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit<br>Anti ARP Che t, Annti ARP an |
| | DNS Client, DNS Relay |
| | ICMPv6, ND, DNSv6<br>IPv6 Policy-based Routing (PBR)<br>IPv6 VRRPv3, IPv6 URPF, IPv6 RA<br>RIPng, OSPFv3, BGP4+<br>MLD Snooping, IPv6 Multi ast VLAN<br>MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS |

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### Hardware Specifications

| | |
|---|---|
| QoS | 8 Queues<br>SP, WRR, SWRR, WDRR, SWDRR<br>WRED<br>Traffic Classificaication Based on 802. OS, ToS, DiffServ DSCP, ACL, port number<br>Traffic Policing<br>PRI Mark/Remark |
| ACL | IP ACL, MAC ACL, IP-MAC ACL<br>Standard and Expanded ACL Based on source/destin ation IP or MAC, IProtocol,<br>TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS<br>Redirect and Statistics<br>Rules can be configured to port, VLAN<br>Time Ranged ACL |
| Security | IEEE 802.1x AAA<br>Port, MAC-based authenti aation<br>Accounting based on time le th and traffic<br>Guest VLAN and auto VLAN |
| | RADIUS for IPv4 and Ipv6 |
| | TACACS+ for IPv4 and Ipv6 |
| | MAB |
| DHCPv4/v6 | DHCP Server/Client for IPv4/IPv6<br>DHCP Relay/Option 82<br>DHCP Snooping/Option 82 |
| Traffic Monitor | sFlow Traffic Analysis |
| Security Network Management | CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6<br>Syslog and external Syslog Server<br>HTTP SSL<br>SNMP MIB, SNMP TRAP<br>FTP/TFTP<br>SNTP/NTP<br>RMOM 1,2,3,9<br>Authenti aation by RadiusACACS<br>SSH v1/v2<br>Dual firmware images/ Configuraration files<br>802.3ah OAM, 802.1ag OAM |
| Data Center Features | VSF (Virtual Switch Framework) |



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