

# 52 Port 10G Uplink 48 Ports Gigabit L2+ Management Ethernet PoE switch

## PRODUCT DESCRIPTION

AP-ESG3048P, 52 Port 10G Uplink 48 Ports Gigabit L2 Management Ethernet POE switch, provides 48\* 10/100/1000M POE Ethernet Ports, 4\* 10G SFP+ Ports, 1\* console Port, 1\* USB Serial Port. With perfect security control policy and CPU Protect Policy, it can improve fault tolerance and ensure the stable operation of the network and load balance of links. The switch supports automatic DoS attack defense, SNMP, IEEE 802.1, STP, RSTP, and link aggregation. With advanced security features and advanced quality of Service (QoS), it can be used as a core, distribution or access layer switch with high-end port density, ease of management, it is an ideal choice for a variety of business networking applications.



## Main Feature

- Support IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, IEEE 802.1p, IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3ae standard.
- L3 management, support DHCP Server, QoS, ACL Control, SNMP V1/V2/V3, IGMP Snooping v1/v2.
- Support STP/RSTP/MSTP (ERPS), Support loop detection and self-healing, remote loop back monitoring and control (802.3ah OAM).
- Support multiple VLAN divisions, MAC VLAN, protocol VLAN, and Private VLAN.
- Support IP address +MAC address +VLAN+ port binding, DHCP Snooping, IP source and DAI protection.
- Support IPV4/ IPV6, RIP, OSPF.
- Surge Protection: Common mode 6KV, Differential 2KV; ESD: Contact 6KV. Air 8KV.
- Support WEB, TELNET, CLI, SSH, SNMP, RMON management.
- Support PoE watchdog, PoE Port power supply, Power configuration and PoE time management.

## Application Environment

- Metro Optical Broadband Network: Data network operators such as telecommunications, cable TV, and network system integration.
- Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
- Multimedia transmission: Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications.
- Real-time monitoring: Simultaneous transmission of real-time control signals, images and data.

## Specification

I/O Interface	
Power Input	AC100-240V/50-60Hz
Ethernet	48* 10/100/1000Mbps POE Ports (Ports 1-4 support BT Power Supply) 4* 10G SFP+ Port 1* RJ45 Console Port 1* USB serial Port
Performance	
Bandwidth	176Gbps
Packet Forwarding Rate	131Mpps
Buffer Memory	512MByte
Flash Memory	32MByte
DDR SDRAM	16Mbit
MAC Address	32K
Jumbo Frame	12Kbytes
VLANs	4096
MTBF	100000 Hours
Network Protocol	IEEE802.3 Ethernet MAC Protocol IEEE802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3z 1000BASE-X Gigabit Ethernet (optical fiber) IEEE 802.3ae 10G Ethernet IEEE802.3x Flow Control IEEE 802.3az Energy-efficient Ethernet IEEE 802.3ad Standard method for performing link aggregation IEEE 802.1AB LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1Q (VLAN Bridge Operation) IEEE 802.1p (VLAN Label) IEEE 802.1X Client/Server Access Control and Authentication Protocol
POE Standard	IEEE802.3af (15.4W) IEEE802.3at (30W) IEEE802.3bt (90W)
Industry Standard	EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD)), EN61000-4-5 (Surge)
Network Medium	10Base-T : Cat3, 4, 5 or above UTP(=100m) 100Base-TX : Cat5 or above UTP(=100m) 1000Base-TX : Cat5 or above UTP(=100m)

Certification	
Safety Certificate	CE, FCC, RoHS
Environment Standard	
Working Environment	Working Temperature:-10°C~50°C Storage Temperature:-40°C~70°C Working Humidity :10%~90%,non-condensing Storage Temperature:5%~90%,non-condensing
Function Indicator	
Indicator	PWR (Power Indicator), SYS (system Indicator), Link (Link Indicator), ACT (ACT Indicator)
PWR	On: System On Flashing: System Off or Failed
SYS	On: System On Flashing: System Off or Failed
Link/ACT	On: Link Connecting Flashing: Data Transmitting Off: Link Off
Physical Specification	
Structure Size	Product Dimensions: 440*360*44.5mm Package Dimensions: 580*440*120mm Product N.W: 5.30KG Product G.W: 6.58KG
Packing Info	Carton Dimensions: 600*460*278mm Packing Quantity: 2Pieces Packing weight:14.2 KG
Power Voltage	Working Voltage: AC100-240V 50/60Hz Power Supply: 52V 11.5A/ 12V 6A
Power Consumption	POE: POE Total Power<640W Power Consumption: Machine<67.5W
Package List	Switch: 1 set; instruction manual: 1 set; certificate of quality: 1 set; power cord: 1 set; serial cable: 1 set; mounting ear: 1 pair

Software Function

L3 Function	
Ipv4	IPv4 VLAN Interface IPv4 Static Routes ARP
Ipv6	Pv6 VLAN Interface IPv6 Static Routes IPv6 ND
RIP	V1/V2
OSPF	Router-ID Authentication

L2 Function	
Port	Port Switch Port Description Port Speed Port Duplex Port Flow Control Jumbo, Up to 10K Support 10G/2.5G (2023.3.2) Fiber Module (DDM)
Link Aggregation	Supports load balance policy; Base on MAC and IP-MAC Static and Dynamic Group Supports LACP Up to 8 groups
Storm Control	Broadcast Unknown Multicast Unknown Unicast
Port Mirroring	One to one monitor Many to one monitor Ingress/Egress/Both Up to 4 session groups
Port Security	MAC Address Constraints Port Security MAC Address Protect/Restrict/Shutdown
Port Isolation	Yes
Port Rate-limit	Bandwidth rate limit
Loopback Detection	
VLAN	Access/Trunk/Hybrid VLAN Tunnel (Q-in-Q Tunnel) Congurable VID from 1 - 4094; Max. 4K static VLAN groups Voice VLAN MAC VLAN Surveillance VLAN Multicast VLAN / Protocol VLAN GVRP
MAC Address	Dynamic Address Static Address Filtering Address
Spanning Tree Protocol	STP/RSTP/MSTP BPDU Filter BPDU Guard Edge Port
LLDP	LLDP LLDP MED
Multicast	IGMP Snooping IGMP V1/V2/V3 Router Port Static IGMP group address IGMP groups Itering Querier MLD Snooping MVR
QoS	Trac classification based, Strict priority and WRR Port Priority 802.1P Priority IP TOS Priority IP DSCP Priority Supports up to 8 queues per port Priority Remarking

PoE	
PoE Configuration	PoE Temperature PoE Type/Level/Power/Voltage/Current PoE Switch PoE Watchdog PoE power AF/AT adaptation IEEE 802.3bt,compatible with IEEE 802.3af/802.3at PoE
PoE Schedule	Yes
PoE Port Timer Reboot	
Services	
DHCP	DHCP Server IP Pool Static Binding DHCP Relay Option 43
Access Protocol	HTTP HTTPS Telnet SSHv2 Manager ACL Session Timeout Password Retry Count Silent Time
Security	
AAA	RADIUS TACACS+ 802.1X Base on port/MAC/local/WEB
DHCP Snooping	Global/VLAN Option 82 Circuit ID
IP Source Guard	Yes
Dynamic ARP Inspection	Yes
DoS	Yes
ACL	MAC ACL IPv4 ACL Ipv6 ACL
Diagnostics	
Syslog	Logging Message Remote Server
Ping	Yes
Traceroute	Yes
Copper Test	Yes
UDLD	Yes
Management	
Manager Access	Console HTTP/HTTPS Telnet SSH SNMP
Manager IP	Static Address DHCP Client Supports Ipv4 and IPv6 address Manager VLAN DNS

Time Synchronization	SNTP Manual Time
SNMP	V1/V2C/V3 Community V3 User Group Trap Host
SNMP MIB	RFC 1213 MIB-II RFC 1493 Bridge MIB RFC 1643 Ethernet MIB RFC 2819 RMON MIB (Groups 1, 2, 3 and 9) RFC 2863 Interface MIB LLDP Private MIB
RMON	Statistics History Event Alarm
Firmware	Double Image; Swap between Active and Alternate firmware image. Firmware Upgrade
Configuration	Upload and download Upload and download via USB interface
Save	Yes
Restart	Yes
Factory Defaults	Yes

### Standards Compliance

IEEE 802.3x flow control and back pressure
IEEE 802.3ad port trunk with LACP
IEEE 802.1D Spanning Tree Protocol
IEEE 802.1w Rapid Spanning Tree Protocol
IEEE 802.1s Multiple Spanning Tree Protocol
IEEE 802.1p Class of Service
IEEE 802.1Q VLAN tagging
IEEE 802.1x Port Authentication Network Control
IEEE 802.1ab LLDP
IEEE 802.3af Power over Ethernet
IEEE 802.3at Power over Ethernet Plus
IEEE 802.3bt PoE++ Power over Ethernet Plus Plus
RFC 768 UDP
RFC 793 TFTP
RFC 791 IP
RFC 792 ICMP
RFC 2068 HTTP
RFC 1112 IGMP v1
RFC 2236 IGMP v2
RFC 3376 IGMP v3
RFC 2710 MLD v1
RFC 3810 MLD v2
RFC 2328 OSPF v2



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