

# ALPHA BRIDGE LAYER3-Lite Switch (AS200/28/XP V3)



Supports Max. 24 GE TX Ports and 4 10G SFP+ Uplink Ports.



Advanced Hardware Architecture and Industry-leading Port Density.



Carrier-Grade, High Reliability, Layer-3 Routing Functions.



Verified Service characteristics, Versatile IPv6 solution, Complete Security Mechanism.

## Product Overview

AS200/28/XP V3 is the Layer 3 Managed PoE Switch that provides high-density performance, Layer 3 static and dynamic routing, RIP (Routing Information Protocol) and OSPF (Open Shortest Path First). With 128 Gbps switching capacity and 4\*1G/2.5G/10Gbps flexible and high performance uplink capability.

The AS200/28/XP V3 provides comprehensive end to end QoS as well as flexible and rich management, security settings, which can meet the high speed, secure and smart requirement for small and medium-size enterprise networks based on cost effective price. With total power consumption up to 440W (850W optional), they offer a rack-mountable, affordable, safe and reliable power solution for SMBs deploying Power over Ethernet networks, or requiring enhanced data security and network traffic management.

## Features

- 4\*1G/2.5G/10G SFP+ slots, 24\*10/100/1000M RJ45 PoE ports
- Complies with IEEE 802.3at, IEEE802.3af standard. Max output power consumption per port can reach 30W (PoE+)
- Smart and standard PoE chipset to detect the PD equipment's automatically, never burn the PD equipment's
- Layer 3 routing features: Supports static and dynamic routing, RIP, OSPF, BGP4, ECMP, VRRP
- Port aggregation: Supports GE ports, 2.5GE and 10GE port aggregation, static and dynamic aggregation
- VLAN: Supports access, truck, hybrid mode and VLAN classification, including the Mac based VLAN, IP based VLAN and protocol based VLAN
- QinQ: Supports port-based, VLAN-based and flow-based QinQ
- Port Mirroring: Many to one port mirroring
- Layer 2 ring network protocol: Supports STP, RSTP, MSTP, G.8032 ERPS protocol, single ring, sub ring
- Multicast: Supports IGMP snooping
- QoS: QoS class, remarking, Supports SP, WRR queue scheduling, Ingress/Engress port-based rate-limit and policy-based QoS
- Security: Support Dot1x, port authentication, mac authentication, RADIUS service; Support port-security, ip source guard, IP/Port/MAC binding, arp-check and ARP packet filtering for illegal users and port isolation
- Management: Supports LLDP, user management and login authentication; SNMPV1/V2C/V3; web management, HTTP1.1, HTTPS; Syslog and alarm grading; RMON (Remote Monitoring) alarm, event and history record; NTP, temperature monitoring; Ping, Tracert and optical transceiver DDM function; Supports TFTP Client, Telnet Server, SSH Server and IPv6 management; PoE management
- Firmware update, configure backup/restore through Web GUI, FTP and TFTP

## Technical Specification

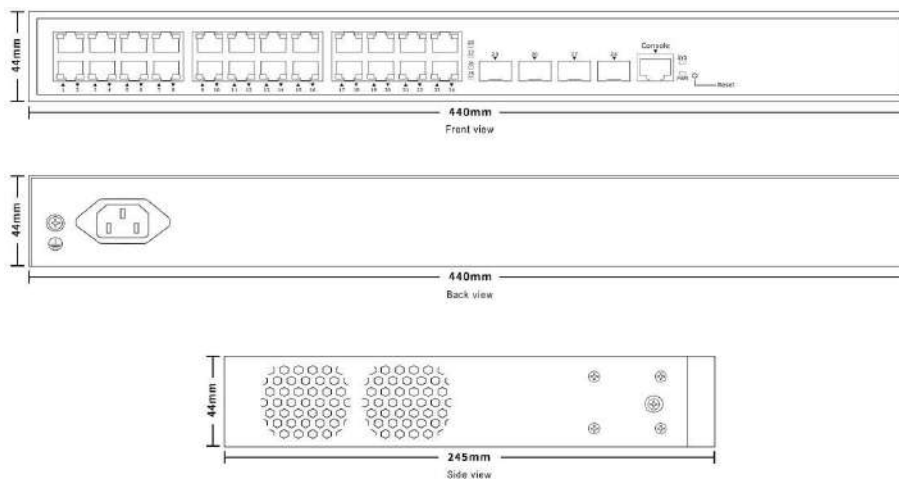
<b>Model No.</b>	AS200/28/XP V3	
	Fiber ports	Copper RJ45 ports
<b>Interface</b>	4	24
<b>Ethernet</b>	24*10/100/1000Base-T RJ45 PoE 4*1G/2.5G/10GBase-X SFP+	
<b>Management port</b>	1*RJ45 Console port (115200, 8, N, 1)	
	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet	
	IEEE 802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol	
	IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN	
	ITU-T G.8032 ERPS	
	IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP	
	IEEE 802.3ad LACP IEEE 802.3af	
	IEEE 802.3at	
<b>LED Indicators</b>		
<b>PWR (Power indicator)</b>	Off: the device is power off or failed	On: the device power on is normal
<b>SYS (System status indicator)</b>	Blinking: device initialization	On: device on normal operation
	Off: ports link down	
	On: ports link up	
<b>1-24 (Copper ports indicators) Green</b>	Blinking: data on TX/RX	
	Off: PoE not working	
<b>1-24 (PoE status indicators) Yellow</b>	On: PoE working	
<b>25-28 (Fiber ports indicators) Green</b>	Off: ports link down	

	On: ports link up
	Blinking: data on TX/RX
<b>Power Parameter</b>	
<b>Input voltage</b>	AC 100-240V
<b>Total power consumption</b>	Full loading without PoE ≤25W Total power consumption with PoE ≤440W (PoE power budget≤ 400W) Total power consumption 850W optional (PoE power budget≤ 740W)
<b>Over-current protection</b>	Support
<b>Layer 2 Functions</b>	
<b>Port aggregation</b>	Support GE port aggregation Support 2.5GE aggregation Support 10GE aggregation Support static aggregation Support LACP dynamic aggregation Up to 64 aggregation groups and up to 8 ports per group
<b>Port features</b>	Support IEEE802.3x flow control Support interface counters Support port isolation Port mirroring (One-to-One, Many-to-One) Support loop detection (Port-based; VLAN-based) Support broadcast storm suppression (broadcast; unknown multicast; unknown unicast)
<b>Mac-address table management</b>	Support static Mac-address management Support dynamic Mac-address Management Support filtering Mac-address Support MAC limit based on port and VLAN Support MAC flapping based on port and VLAN
<b>VLAN</b>	Support access mode Support trunk mode Support hybrid mode
<b>VLAN classification</b>	Mac Based VLAN IP Based VLAN Protocol Based VLAN
<b>GVRP</b>	Normal mode Fixed mode Forbidden mode
<b>QinQ</b>	Port-based QinQ VLAN-based QinQ (VLAN-stacking; VLAN-mapping) Flow-based QinQ
<b>LLDP</b>	LLDP (Link Layer Discovery Protocol)
<b>Ring network protocol</b>	Support IEEE802.1D-STP Support IEEE802.1W-RSTP Support IEEE802.1S-MSTP Support G.8032 ERPS protocol, single ring, sub Ring and major ring Recovery time ≤20ms
<b>L2 Multicast</b>	
<b>IGMP snooping</b>	Support IGMP snooping
<b>Group address</b>	Support group address
<b>Security Functions</b>	
<b>ACL</b>	IP Standard ACL MAC extend ACL IP extend ACL IPv6 ACL
<b>QoS</b>	Support QoS Class, remarking Support SP, WRR queue scheduling Ingress port-based rate-limit Egress port-based rate-limit Support policy-based QoS
<b>802.1x</b>	Port access control Mac-address access control RADIUS server
<b>Port-security</b>	Port-security
<b>IP source guard</b>	IP Port/MAC binding
<b>ARP-check</b>	Support ARP-check and ARP packet filtering for illegal users
<b>Access control</b>	Support Telnet/SSH/HTTP/HTTPS user access control
<b>Management &amp; Maintenance Functions</b>	
<b>User Management</b>	Support password protection Support user authorization management

<b>SNMP</b>	Supporting SNMP V1/V2C/V3 version
<b>Web Management</b>	Web Management Support HTTP V1.1 Support HTTPS
<b>CLI management</b>	Console/Telnet command line management
<b>RMON</b>	Support RMON (Remote Monitoring) alarm
<b>Firmware upgrade</b>	Firmware upgrade
<b>Fault Detection</b>	Ping/Tracerout Support optical transceiver DDM function
<b>Cable detection</b>	Support copper port cable detection
<b>PoE management</b>	Support 802.3af/802.3at Support PD watchdog Support PoE priority management Support Max PoE power configuration for each port Support alarm waterline configuration Support reserved power configuration
<b>NTP</b>	Network Time Protocol
<b>Syslog/Debug</b>	Syslog/Debug Syslog send to three servers
<b>Configuration import/export</b>	Support FTP/TFTP remote import/export
<b>Dual partition management</b>	Support dual partition switching
<b>Application Protocol Functions</b>	
<b>DHCP Snooping</b>	DHCP snooping trust port Support remote-id/circuit-id configuration DHCP option-82
<b>DHCP client</b>	Support DHCP client
<b>Telnet server</b>	Support telnet server
<b>Telnet client</b>	Support telnet client
<b>SSH server</b>	Support SSH server
<b>TACACS</b>	Support TACACS(the terminal access controller accesses the control system)
<b>sflow</b>	Support network traffic analysis
<b>TFTP</b>	Support TFTP Client
<b>Layer 3 Functions</b>	
<b>ARP</b>	ARP table aging
<b>DHCP server</b>	
<b>IPv4 / IPv6</b>	static routing
<b>ECMP</b>	Support ECMP (Equal-cost multi-path routing)
	Support the configuration of ECMP Max next-hop
	Support capacity balanced configuration
<b>Route policy</b>	IPv4 prefix-list
<b>VRRP</b>	Virtual Router Redundancy Protocol
<b>Routing Protocol Specification</b>	
<b>RIP</b>	RIPv1/v2
<b>OSPFv2</b>	OSPFv2
<b>BGP4</b>	BGP4 BGP Support Routing Recursive ECMP Support to view the number of neighbors and up/down state
<b>IS-IS</b>	IS-ISv4
<b>Routing entry</b>	13K
<b>Switching Features</b>	
<b>Switching capacity</b>	128Gbps
<b>Packet forwarding rate</b>	190.4Mpps
<b>MAC address table</b>	16K
<b>VLAN</b>	4K
<b>Buffer</b>	12Mbit
<b>Forwarding delay</b>	<5us
<b>Jumbo Frame</b>	Support 10Kbytes
<b>MDX/MIDX</b>	Support

Watchdog	Support
<b>Mechanical structure</b>	
Installation method	Desktop; Rack-mount
Dimension(W*D*H)mm	440*245*44mm
Weight	4.2kg (440W power supply); 4.8kg (850W power supply)
<b>Operating Environment</b>	
Operating temperature	0°C~+50°C
Storage/transportation temperature	-10°C~+70°C
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
MTBF	>100,000 hours

## Structure diagram



## Model



**AS200/28/XP V3**

24\*10/100/1000M RJ45 PoE  
4\*1G/2.5G/10G SFP+

## Ordering Information

Model	Description
AS200/28/XP V3	Layer 3 managed PoE switch with 4*1G/2.5G/10G SFP+ slots and 24*10/100/1000M RJ45 PoE ports, AC 100-240V 50/60Hz, total power consumption 440W (850W optional)

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