

# ALPHA BRIDGE LAYER 2 Switches (AS200/28/P)







Carrier-Grade, High Reliability, Layer-3 Routing Functions. Verified Service characteristics, Versatile IPv6 solution, Complete Security Mechanism.



Advanced Hardware
Architecture and Industryleading Port Density.



Supports Max. 28 GE TX Ports and 6 10G SFP+ Uplink Ports.



Carrier-Level Ethernet Access Switch

Alpha Bridge AS200/28/P supports the carrier-level Ethernet ring protection protocol with less than 50ms recovery time, STP/RSTP/MSTP, backup uplink ports, and LACP link aggregation to cater to the requirements of high reliability of carriers.

Alpha Bridge AS200/28/P has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods.

Alpha Bridge AS200/28/P supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade.

Alpha Bridge AS200/28/P supports various L2 multicast functions such as IGMP-snooping, fast-leave and MVR to fully meet the operation requirements of carrier's IPTV.

### **Product Overview**

Alpha Bridge AS200/28/P is a new-generation intelligent gigabit access switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high performance hardware and ROS platform, it supports functions such as ACL, Q-in-Q and QoS. Its simple management mode and flexible installation can meet the requirement of any complicated scenarios.





## **Product Characteristics**

#### Comprehensive IPv6 Solutions

Alpha Bridge AS200/28/P supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6 and Path MTU discovery.

Alpha Bridge AS200/28/P supports Ping, Traceroute, Telnet, SSH and ACL on the basis of IPv6, meeting IPv6 network's equipment management requirements and service control requirements.

#### **Enhanced QoS**

Alpha Bridge AS200/28/P supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services.

Alpha Bridge AS200/28/P provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port.

Alpha Bridge AS200/28/P supports multiple queue schedule algorithms such as SP, WRR and "SP + WRR".

#### Security+

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP- related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Perfect security authentication mechanisms: IEEE 802.1x, Radius and Tacacs+.

Alpha Bridge AS200/28/P supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

Alpha Bridge AS200/28/P supports perfect ring detection mechanism, ensuring the long-term stable running of network.

Alpha Bridge AS200/28/P supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

#### Easy Management and Maintenance

Alpha Bridge AS200/28/P supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP.

Alpha Bridge AS200/28/P supports the WEB management mode, which is easy and efficient for installing and debugging the device.

Alpha Bridge AS200/28/P supports FTP, TFTP and SFTP.

Alpha Bridge AS200/28/P supports ISSU (In-Service Software Upgrade).

Alpha Bridge AS200/28/P supports SNMP and NMS smart network management platform. The combination realizes automatic equipment discovery, Network Topology Management, equipment configuration management, performance data statistics and analysis and trouble management.

Alpha Bridge AS200/28/P supports Zero Touch Provisioning(ZTP) function to minimize manual operator intervention and helps reduce customer's initial deployment costs.

#### Intelligent PoE+

AS200/28/P support IEEE 802.3af/at PoE standard, and power mapping scales up to a maximum of 370W of PoE+ power.

AS200/28/P support PoE non-stop power supply. The PoE+power is maintained during a switch reload.

AS200/28/P support manual and dynamic PoE power allocation.

AS200/28/P support up to 2KV thunder-proof of the PoE port and power supply.

### **Model**



#### AS200/28/P

24 GE POE 4 GE/TX SFP COMBO



## **Product Specifications**

Item	AS200/28/P	
Interface (Ports)	24 GE PoE 4 GE TX/SFP combo	
Backplane (Gbps)	56	
Forwarding rate (Mpps with 64 bytes)	42	
Chassis Dimensions (WxDxH) (mm)	440x210x44	
Chassis Weight (KG) (empty)	3	
Package Dimensions (WxDxH) (mm)	555x295x88	
Package Dimensions Weight (KG)	4.1	
Power consumption (No-load)	<17W	
Power consumption (Full-load)	393.5W	
Power supply AC: 100-240V / DC: 36-72V	400W	
POE power budget	370W	
Total output BTU (1000 BTU/H = 293W)	1365.19	
Fan number	2	
Noise@25°C(dBA)	37.5	
MTBF(H)	> 50,000	
Forwarding mode	Store-forward	
Flash (MB)	16	
DRAM (MB)	128	
MAC	8К	
Buffer size (MB)	4.1	
Jumbo frame	9к	
Console (RJ45)	1 RJ45 port, 1 RST button	



## **Product Features**

VLAN	QoS	Reliability
4K Active VLAN, Q-in-Q & Selective Q-in-Q, GVRP, Private VLAN, Voice VLAN	CAR, HQoS, MAC/IP/TCP/UDP/VLAN/ COS/DSCP/TOS based QoS, 802.1P/ DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED,flow monitoring and traffic shaping	Static/LACP link Aggregation, Interface backup, EAPS and ERPS, ISSU uninterrupted system upgrade, VSS, ups to 16-units per stack, VRRP, UDLD
Spanning Tree	Security	Accessories
802.1D (STP), 802.1W (RSTP) and 802.1S (32	Port isolation, Port security, IP+MAC+port binding, MAC sticky, IEEE 802.1x, Radius and Tacacs+, MD5, SHA-256, RSA-1024, AES256, L2/L3/L4 ACL flow identification and filtration, Anti-attack from DDoS,	Power cord, rackmount kits, console cable
instances MSTP)	TCP's SYN Flood, UDP Flood.	Certification
BPDU guard , root guard and Loopback guard	Broadcast/Multicast/unknown unicast storm-control.	CE, ROHS
	DAI & IP source guard, PPPoE+	
IP	DHCP	Multicast
Static route, RIP, OSPF IP v4/V6 Dual stack, DHCP server /Client Relay.	DHCP server/relay/client, DHCP snooping/option82	IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter
IPv6	Environment	Management
ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet, IPv6 neighbor discovery, Path MTU discovery, MLD V1, MLD snooping, IPv6 Static Routing, RIPng, OSPFv3, Manual tunnel, ISATAP tunnel, 6 to 4 tunnel	Operating temperature/humidity: 0°C to 50°C, 10%-90% Non-condensing Storage temperature/humidity: (-20°C to 70°C), 5%-95% Non-condensing	Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON, TFTP, FTP, SFTP, Dying gasp*, NTP, ZTP(Zero Touch Provisioning),SYSLOG, SPAN, RSPAN

## **Ordering Information**

Item	Description
AS200/28/P	Ethernet PoE switch with 28 GE ports (1 console port, 24 GE PoE ports, 4 GE TX/SFP combo ports, 1 standard AC220V power supply, 400W, the cooling fan, 1U, standard 19-inch rack-mounted installation)

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