ALPHA BRIDGE- LAYER 3-Lite Switch (AS200/28/2XT)

Supports 24 Ports 2.5G RJ45 and 6 10G SFP+ Uplink Ports.

Ups to 16-unit Virtual Stack

Carrier-Level, High Reliability, Full Layer-3 Functions.

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

Product Overview

AS200/28/2XT is a Alpha Bridge-developed multigigabit Ethernet switch oriented for the next generation IP metropolitan area network, largecampus network, and enterprise network.

AS200/28/2XT series adopts the cutting-edge hardware architecture and is equipped with the ABOS operating system with Alpha Bridge independentintellectual property rights. On the basis of providing high-performance L2/L3/L4 wire-speed switching services, AS200/28/2XT further integrates various network services such as IPv6 and network security.

Combined with multiple high-reliability technologies such as uninterrupted upgrades, uninterrupted forwarding, graceful restart, and redundancy protection, AS200/28/2XT ensure the long-term stable communication capability of the network. AS200/28/2XT are widely used in high-end WiFi6 deployment, cyber cafes, and E-sports.

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Product Characteristics

Advanced hardware architecture, cutting edge processing capability

AS200/28/2XT 1U pizza-box switch realizes the ultra-high port density of 24-Port 2.5G RJ45 Port and 6-Port 10G SFP+. Equipped with high-performance ASIC switch chips, the Alpha Bridge series can meet the application requirements of various complex scenarios.

Doubled performance: The virtualized system makes full use of every link between physical devices avoiding the link congestion of the traditional networkingmodel Spanning Tree Protocol, making the best use of devices, doubling the performance, and protecting the original link investment to the greatest extent.

High Reliability: Based on advanced distributed processing technology, the efficient cross-physical device link aggregation function separates the logicalcontrol plane, service control plane and service data plane, providing uninterrupted Layer 3 routing and forwarding and avoiding business interruption causedby the single failure.

Product Characteristics

Easy management: The entire virtual system realizes unified management of a single IP, and physical devicesare visible to users, which simplifies the management of network devices and network topology, greatly improves operation efficiency, and effectively reduces operation and maintenance costs.

Carrier-level high reliability

Based on Hitless Protection System (HPS), the key components of the S5700-P Series, such as powersupply modules, are redundant backup and hot- swappable, which supports seamless switchover incase of failure without manual intervention.

S5700-P Series supports STP/RSTP/MSTP, VRRP, ring network protection, dual uplink active/standbylink protection, LACP and other simple and efficientredundancy protection mechanisms.

AS200/28/2XT supports In-Service Software Upgrade (ISSU), ensuring the unremitting data forwarding duringsystem upgrade.

The ultra-high-precision BFD mechanism, through linkage with Layer 2 and Layer 3 protocols, realizes millisecond-level fault detection and service recovery, which greatly improves the reliability of the network system.

Perfect Ethernet OAM mechanism, supporting 802.3ah and 802.1ag, realizes rapid detection and location of faults through real-time monitoring of network operationstatus.

The high-reliability hardware and software of the AS200/28/2XT meet the fault recovery time requirementof 50ms for carrier-level services and truly achieve the high reliability (99.999%) of carrier-class core devices.

Innovative BVSS

The Alpha Bridge AS200/28/2XT supports innovative ABCOM Virtual Switch System (ABVSS), which can virtualize multiple physical devices into one logical device with unparalleled performance, reliability, and management compared to stand-alone physical devices.

Rich service features

Perfect Layer 2 and Layer 3 multicast routing protocols meet the access requirements of IPTV, multi-terminal high-definition video surveillance and video conferencing.

Complete Layer 3 routing protocols and large routing table capacity meet the needs of various network interconnection and can built up ultra-large campusnetwork, enterprise network and industry private network.

Comprehensive IPv6 Solutions

Supports IPv6 multicast features such as MLD, MLDSnooping, IPv6 static routing, IPv6 Layer 3 routing protocols such as RIPng, OSPFv3, BGP4+, providingcomplete IPv6 Layer 2 and Layer 3 solutions.

Supports a wealth of IPv4 to IPv6 transition technologies,including: IPv6 manual tunnel, automatic tunnel, 6to4 tunnel, and ISATAP tunnel to ensure the smoothtransition from IPv4 network to IPv6 network.

Perfect security mechanisms

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 largetraffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Perfect security authentication mechanisms: EEE 802.1x, Radius and TACACS+.

Enhanced service security mechanism: Supports clear text or MD5 authentication of related routing protocols, and Unicast Reverse Path Forwarding (uRPF), which can effectively control illegal services; supports in-depthdetection and filtering of control packets and data packets, thereby effectively isolating illegal data packets and improving the security of the network system.

Innovative eco-friendly design

Intelligent power management system: AS200/12XP & AS200/30XP adopt advanced power system architecture design to achieve efficient power conversion, unique power monitoring, slow start function, real-time monitoring of the running status, intelligent adjustment, and deepenergy saving.

Intelligent fan management system: Intelligent fan design supports automatic speed regulation, effectivelyreduces the speed, reduces noise, and prolongs the service life of the fan.
Supports energy-efficient Ethernet function and complies with the international standard IEEE 802.3azEEE, effectively reducing energy consumption.

Product Specifications

Item	AS200/30XP
Interface	24-Port 2.5G RJ45 Ports 6-Port 10G/GE SFP+ Ports
Console (RJ45)	1-Port RJ45
Switching Capacity	240 Gbps
Forwarding rate (Mpps with 64 bytes)	180 Mpps
Chassis Dimensions (WxDxH) (mm)	440*280*44
Package Dimensions (WxDxH) (mm)	576x448x94
Package Dimensions Weight (KG)	5.2
Power supply AC: 100-240V / DC: 36-72V	AC: 100V-240V, 50/60Hz
Total output BTU (1000 BTU/H = 293W)	163.82
Fan number	2
Noise@25°C (dBA)	45
MTBF(H)	>200,000
Forwarding mode	Store-forward
Flash (MB)	16
DRAM (MB)	512
MAC	32K
Buffer size (MB)	2
Total SVI	1K
Routing table	512
Jumbo frame	9K

Product Features

VLAN	QoS	Reliability
4K Active VLAN, Q-in-Q & Selective Q-in-Q, GVRP, Private VLAN, Voice VLAN	• Traffic classification of port/ L2~4 protocol headers/VLAN/CoS/DSCP • CAR traffic control • 802.1P/DSCP priority mapping andremark • Multiple queuing algorithms such as SP, WRR or SP+WRR • Tail-Drop, WRED • Traffic supervision and traffic • Shaping • 8 queues per port	• 802.3ad Static/LACP link aggregation, • EAPS • G.8032 ERPS • ISSU • VRRP • GR for OSPF and BGP • BFD for OSPF and BGP • BVSS virtual stacking system

Spanning Tree	Security	Accessories
802.1D (STP), 802.1W (RSTP) and 802.1S (32 instances MSTP) BPDU guard, root guard and Loopback guard	• DDoS attack prevention, TCP-SYN/UDP/ARP Flood attack prevention • IEEE 802.1x authentication, multiple-user authentication,guest vlan • L2~L4 ACL • Anti-DOS/IP spoofing/TCP/ping/ SYN/ICMP flood attacks • Broadcast/multicast/unknown-unicaststorm-control • Port isolation • Port Security, MAC address limitation, IP+MAC+port binding • DHCP Snooping, DHCP Option 82 • DAI (Dynamic ARP Inspection) • IPSG (IP Source Guard) • IEEE 802.1x certification • MAC-based authentication • AAA • Radius, TACACS+ • Multiple user privileges	Power cord, rackmount kits, console cable
		MPLS
		MCE

IPv4	DHCP	Multicast
• Static routing, RIP v1, v2, OSPF, BGP • Policy Based routing, PBR • ECMP • BFP for static routing, RIP, OSPF, BGP	· DHCP server, client, relay,snooping	• IGMP v1/v2c/v3 • IGMP Snooping • IGMP Fast Leave • Multicast group policy and multicast number limit • Multicast filtering • MVR • IGMP snooping in certain portand VLAN. • Support for transparent passing • of multicast traffic without IGMP • snooping in certain port and VLAN • PIM-DM/SM/SSM

IPv6	Environment	Management
• IPv4/v6 dual stack • ICMPv6, DHCPv6, ACLv6 and IPv6Telnet • IPv6 neighbor discovery • Path MTU discovery • MLD V1 • MLD snooping • IPv6 Static Routing, RIPng,	• Operating temperature/humidity: 0°C -50°C ,10%-90% non-condensing • Storage temperature/humidity: -20°C -70°C , 5%-95% non-condensing	• CLI: Console, Telnet, SSHv1/2 • Web-GUI: HTTP, HTTPS/SSL • SNMP v1/v2c/v3, RMON, SNMP alarm/inform/traps. • Upload and download of • FTP/TFTP/SFTP files

OSPFv3, BGP4+ • Manual tunnel, ISATAP tunnel,6-to-4 tunnel.		• Debugging • Syslog for alarm/notification/ • command/debug • Web-GUI: HTTP, HTTPS/SSL • NTP • SPAN, RSPAN (1:1 and N:1 mirror) • LLDP, LLDP-MED • sFLOW • ZTP (Zero Touch Provisioning) • Optical DDM • Ethernet cable diagnosis · 802.3ah, 802.1ag

MODEL

AS200/28/2XT

24-Port 2.5G RJ45

6-Port 10G/GE SFP+

Ordering Information

Item	Description
AS200/28/2XT	24-Port 2.5G RJ45, 6-Port 10G SFP+ L3 Managed Switch (built-in single AC-220V power supply; with cooling fan, 1U, standard 19-inch rack-mounted installation)