

# ALPHA BRIDGE LAYER3-Lite Switch (AS200/12XT)



Supports Max. 8 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

L3-Lite Series is the next-generation aggregation 10GE switch portfolio introduced by ABTPL. It targets the IP MAN (Metropolitan Area Network), Government and Enterprise Networks, Internet cafe, and Disk-Less working environments. It is developed based on high-performance hardware and ABOS software platform with ABTPL's own independent intellectual property rights. It supports functions such as powerful ACL, flexible Q-in-Q, 1:1 or N:1 VLAN switching, Ethernet OAM, carrier-level QoS, and industry-level 10GE Ether-ring, ensuring this switch series meets application requirements in all kinds of complicated sites. It also supports layer-3 routing protocol.

## Product Characteristics

### Virtual Cluster Switching

Alpha Bridge Series virtualizes multiple physical devices into one. The performance, reliability and management of the virtual system are superior to the physical ones.

**High Reliability:** Based on the advanced distribution mechanism and efficient cross-physical link aggregation link functions, the logical control plane, service control plane and service data plane are separated.

Alpha Bridge Series supports In-Service Software Upgrade (ISSU) to ensure the uninterrupted data forwarding during system upgrade.

It can support continuous layer-3 routing forwarding, avoiding service interruption as a result of a single point of failure. **Easy Management:** the OS realizes single IP management, greatly improving the networking efficiency and lowering the operating cost.

## Product Characteristics

### Intelligent stacking technology

AS200/12XT switch supports VST stacking function. Multiple switches supporting stacking feature are combined to form a virtual switch logically. VST stacking system improves the device-class reliability by redundant backup among multiple member devices, and improves the link-class reliability by the link aggregation function across devices. VST provides a powerful network expansion capability. By adding member devices, it can easily expand the number of ports, bandwidth and processing capacity of the stacking system. VST simplifies the configuration and management.

After stacking is formed, many physical devices become a virtual device, and users can log into the master switch to configure and manage all member devices of the stacking system in a unified manner.

AS200/12XT also support multi-chassis link aggregation group (M-LAG), which enables links of multiple switches to aggregate into one to implement cross-device link backup. The rest of switches in the M-LAG group are working actively regardless any switch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.

### High Availability

AS200/12XT switch not only supports the traditional STP/RSTP/MSTP spanning tree protocol, but also supports the G.8032 international standard G.8032 protocol issued by ITU-T. This standard can realize 50ms millisecond fast protection switching of Ethernet ring network.

### Perfect security policy

AS200/12XT switch provides various security policies such as user authority/identity authentication, port security, port rate limitation, port monitoring, ACL, loopback detection, and 802.1X authentication; provides various protect mechanisms for user access and network security. It has perfect security function design and supports MAC+IP+VLAN binding and 802.1X authentication security policies, and anti-network storm attack, anti DOS/DDOS attack, anti ARP attack, and anti-network protocol packet attack security technologies. In this way, the attacks and virus can be prevented and it is more suitable for large-scale, multi-service and complicated-traffic networks.

### Advanced QoS

AS200/12XT switch supports eight queues per port and the queue scheduling policies such as SP, RR, WRR, and WDRR; rich priority mappings including 802.1p, COS, DSCP; Kbps-level port traffic rate restriction and carriers can limit the rate according to the time period; Tail Drop and RED packet loss algorithm.

### Zero Touch Implementing

AS200/12XT support Zero Touch Provisioning (ZTP). It enables the switch to automatically obtain and load version files from file server through DHCP server or USB flash disk.

### BD-LAN Controller Management

AS200/12XT can be managed by Alpha Bridge BD-LAN controller, which is an integrated SDN platform for campus network. It simplifies campus network security, deployment, and management with the latest software-defined network technologies. It helps the network team complete most of the work on the BD-LAN controller platform. Compared with traditional methods, BD-LAN solution can make the network deployment faster, maintain the network easier, troubleshoot much more efficient, and save customer's overall cost.

### Free Licensing Policy

Alpha Bridge always insists on "One-time investment" free license policy, the standard features and advanced features will be never divided to different version. For any new firmware version, Alpha Bridge will share to customers without extra charge. Compared with other manufacturers, Alpha Bridge free license policy can better protect users' short-term and long-term investment.

### IPv4&IPv6 Dual-stack ability

AS200/12XT switch comes with IPv4/IPv6 dual-stack platform which provides hardware-based IPv4/IPv6 wire-speed forwarding and IPv4/IPv6 static routing protocol. With these IPv6 features, the AS200/12XT /XP can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.



8\*100/1000M Base-T  
4\*10G SFP+

## Product Specifications

Item	AS200/12XT
Interface	8*100/1000M Base-T interfaces 4*10G SFP+ interfaces
Console (RJ45)	1
Backplane (Gbps)	96
Forwarding rate (Mpps with 64 bytes)	71.4
Chassis Dimensions(WxDxH) (mm)	275x230x44.2
Chassis Weight(KG) (empty)	
Package Dimensions(WxDxH) (mm)	
Package DimensionsWeight (KG)	
Power consumption(No-load)	< 25W
Power consumption(Full-load)	
Power supply AC: 100-240V / DC: 36-72V	
POE power budget	NA
Total output BTU (1000 BTU/H = 293W)	
Fan number	NA
Noise@25°C(dBA)	
MTBF(H)	>80000
Forwarding mode	
Flash (MB)	
DRAM (MB)	
MAC	16K
Buffer size (MB)	
Interface VLAN	4K
Routing table	512
Jumbo frame	12K

## 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 instances MSTP)  BPDU guard, root guard and Loopback guard	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, TCP's SYN Flood, UDP Flood.  Broadcast/Multicast/unknown unicast storm-control.  DAI & IP source guard, PPPoE+	Power cord, rackmount kits, console cable  <b>Certification</b>  CE, ROHS
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
AS200/12XT	Ethernet Layer-3 lite switch with 8 GE and 4 10GE ports (1 Console port, 8 GE TX ports, 4 10GE/GE SFP+ ports; 100 to 240 VAC input, 60 HZ, fan less, 1U, standard 19-inch rack-mounted installation)

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