ALPHA BRIDGE AS200/10/I/8T2F Industrial Switch

Wide-range working temperature 800,000 hours MTBF

Advanced Hardware Architecture and Industry-leading Port Density.

IP40 protection 6KV lightning protection

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

Product Overview

Alpha Bridge AS200 Series, based on a new generation of high-performance hardware and ABOS platform of Alpha Bridge's independent intellectual property rights, supports ACL, QinQ, QoS and static routing. Alpha Bridge AS200 Series with standard DNI-rail shell provides wide-voltage dual power input. Alpha bridge AS200 series uses highly reliable industrial Ethernet ring network technology. The hardware-based algorithm can ensure that the self-healing time of each node is less than 5 milliseconds, and the self-healing time of the ring network is less than 50 milliseconds (typical value).

The POE model conforms to the IEEE 802.3af/ at standard, and supports 30W full-load power supply, centralized power supply management, and POE terminal detection.

The reliable industrial design of Alpha Bridge AS200 Series such as electromagnetic compatibility, anti-vibration and anti-shock capability, and IP40 protection, can be widely used in energy, transportation, industrial production, environmental protection, military industries.

Product Characteristics

Lightning protection level: 6KV.IP40 protection, industrial fan-less thermal conduction. DIN-rail aluminium alloy shell, which is compact and convenient.

Conforms to IEEE802.3af/at standard, maximum 30W POE power of single port. Intelligent standard 48V POE power supply, and self-negotiation power supply according to terminal type. Supports STP/ EAPS/ERPS.

Supports node self-healing time les s than 5 milliseconds, and ring network self-healing time less than 50 milliseconds (typical value). Supports forming a self-healing ring network between any two ports, and supports multiple independent self- healing rings.
Provides a data packet loss protection mechanism for quickly recovering from failures. Provides hierarchical bandwidth services through rate limiting and traffic shaping in the layer-2 QoS function.

Supports simple network management protocol (SNMP) and cloud-based operating platform (COP). The mean time between failures exceeds 800,000 hours.

Product Characteristics

Comprehensive IPv6 Solutions

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

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

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

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

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

Easy Management and Maintenance

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

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

Alpha Bridge AS200 Series supports FTP, TFTP and SFTP.

Alpha Bridge AS200 Series supports ISSU (In-Service Software Upgrade).

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

Product Specifications

Item	AS200/10/I/8T2F
Interface (Ports)	8 GE TX 2 100/1000M SFP
Console (RJ45)	1 RJ 45
Backplane (Gbps)	56 Gbps
Forwarding rate (Mpps with 64 bytes)	15 Mpps
Chassis Dimensions (WxDxH) (mm)	165x130x65
Chassis Weight (KG) (empty)	1.04
Package Dimensions (WxDxH) (mm)	242*207*86
Package Dimensions Weight (KG)	1.5
Power consumption (No-load)	<12W
Power consumption (Full-load)	18W
Power supply AC: 100-240V / DC: 36-72V	Dual DC 12~ 55V
POE power budget	NA
Total output BTU (1000 BTU/H = 293W)	61.43
MTBF(H)	>800,000
Forwarding mode	Store-forward
Flash (MB)	16
DRAM (MB)	128
MAC	8K
Buffer size (MB)	4
Jumbo frame	9K
Total SVI	10

Product Features

VLAN	QoS	Reliability
4K VLAN entries, GVRP, Q-in-Q, Private VLAN	CAR traffic control, 802.1P/DSCP priority remark, Multiple queuing algorithms such as SP, WRR or SP+WRR, IP ACL/ANY/VLAN/COS/ DSCP/IP Preference based QoS, Traffic supervision and traffic shaping, Drop Redirect	Static/LACP, Ethernet OAM, ISSU, Backuplink
Ring Protection	**Security**	**ACL**
802.1D (STP), 802.1W (RSTP), 802.1S (MSTP), BPDU protection, root protection and ring protection, EAPS, ERPS	Identification and filtering of L2/L3/L4-based ACL, Suppression of broadcast, multicast and unknown unicast packet, Port isolation, Port security, IP+MAC+port binding, DHCP snooping, DHCP option82, IEEE 802.1x authentication, Radius and ABTacacs authentication, Command line hierarchical protection	L2/L3/L4 ACL, IPv4, IPv6 ACL, VLAN ACL
		Certification
		CE, ROHS
IP Routing	**DHCP**	**Multicast**
Default Gateway	DHCP client, DHCP snooping	IGMP Snooping, IGMP Fast Leave, MVR, Multicast group policy and multicast number limit
IPv6	**Environment**	**Management**
ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet, IPv6 neighbor discovery, Path MTU discovery, MLD snooping	Redundant dual power input, Non PoE Operating temperature: - 40~85°C PoE Operating temperature: -40~75°C	Console, Telnet, SSH 2.0, HTTP, HTTPS, SNMP v1/v2/v3, RMON, Upload and Download files through TFTP/FTP, ZTP (Zero Touch Provisioning)

Ordering Information

Item	Description
AS200/10/I/8T2F	Managed industrial switch with 2 Gigabit SFP ports and 8 Gigabit TX ports; industrial DC 12~55V redundant dual power input, operating temperature: -40~85°C; lightning protection level of 6KV; IP40; DIN-rail installation.