AX6700S Series

Full-Spec Fault-Tolerant Switches That Realize "Non-Stop Networks"

The AX6700S series provides a chassis-type multilayer switch with a maximum switching capacity of more than 1 terabit, featuring improved reliability, power saving functions, and a large-capacity slot band.

AX6708S

Large Capacity and High Performance

- High performance triple play environment
  ◎ Provides high packet forwarding performance even for short packets, and operation stability in a multimedia environment.
- Large-capacity design
  ◎ Provides a scalable large-capacity slot band with an architecture in which the control unit and the switching unit are installed as an independent module, and achieves high availability by localizing a failure range.

Network Virtualization (Network Partition)

- Simple, low-cost network virtualization
  ◎ Capable of network integration and separation while maintaining security and independence by logically dividing a network composed of VRF (virtual routing and forwarding) and VLANs (virtual LANs) into VPNs (virtual private networks).
- Flexible network operation
  ◎ Capable of allocating an independent IP address space for each partition, allowing for flexible network configuration without concern about address overlaps.

High Reliability and High Availability

- Highly stable operation with fault-tolerant technology
  ◎ Ensures simple, dynamic redundancy with architectures featuring a highest level of device availability, together with GSRP and Graceful Restarts. Provides "nonstop" high-speed hardware-based switching operation in 50 milliseconds (shortest time).

Advanced Security

- Authentication/quarantine solutions
  ◎ Supports triple authentication (IEEE 802.1X/Web/MAC). Combined with authentication/quarantine servers, achieves quarantine solution in which only PCs that have passed quarantine checks are allowed to access a network.

Green IT

- Power-saving design
  ◎ Reduces the number of ASICs used per device with a centralized packet forwarding architecture, reducing power consumption.
- Dynamic power saving
  ◎ Supports the dynamic power saving function that enables operation scheduling on a basis of year/date/time, to reduce power consumption during a time of low network usage (e.g., nighttime or holidays) by switching the operation mode of each unit without interruption.
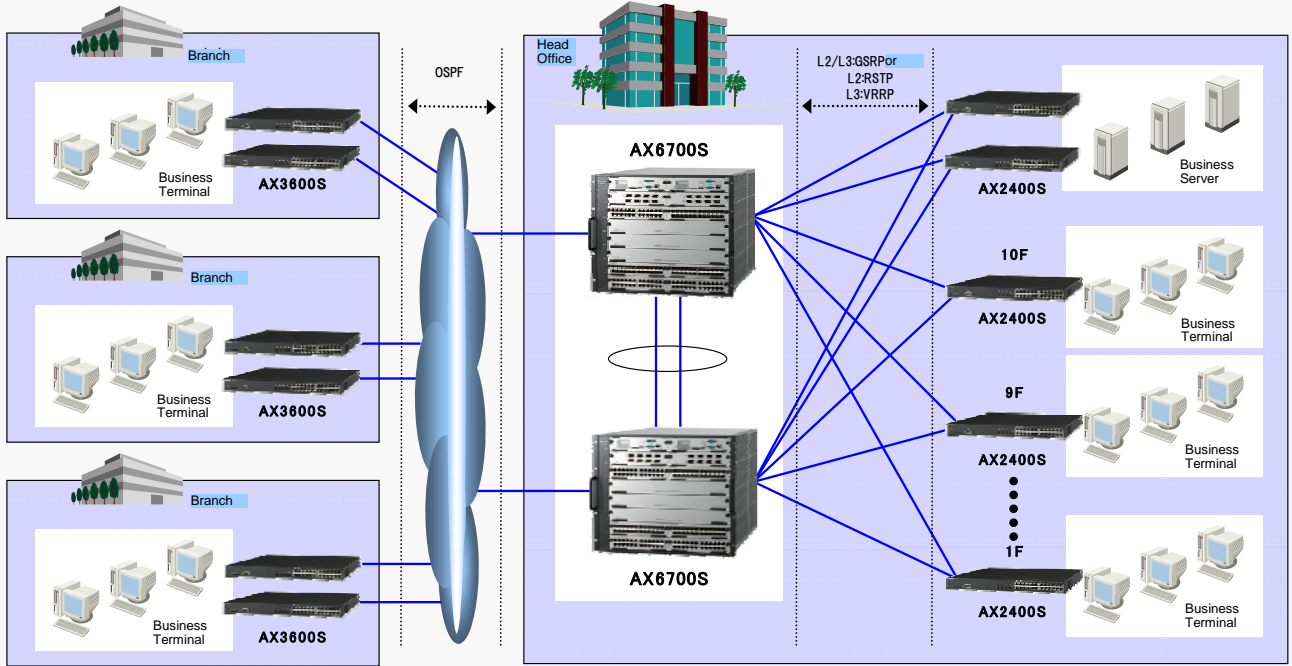
Cost-Effective System Configuration

- High port density accommodation
  ◎ Reduces a per-port price with the high port density accommodation of 1-gigabit and 10-gigabit lines with switching capacity of up to 1.15 Tbps.
  - 10 G Ethernet: accommodates up to 64 ports.
  - 1 G Ethernet: accommodates up to 192 ports.

Lower Operation Management Costs

- Simplified network configuration/operation with OAN
  ◎ Enables automatic operation in cooperation with security checks, and reduces the cost of operation management with ALAXALA proprietary OAN (open autonomic networking) concept.
- Simplified maintenance
  ◎ Simplifies and reduces the time for maintenance with command-free maintenance to easily back up configurations and collect information on faults.

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AX6700S Application Example

·······Core Switch for an External Information System·······

AX6700S Product Specifications

Model			AX6708S	
Performance	Maximum switching capacity		1.15Tbps[#1]	
	Maximum packet forwarding performance		720Mpps[#1]	
Port count	10GBASE-R	XFP(SR/LR/ER/ZR)	64	
	1000BASE-X	SFP(SX/SX2/LX/BX/LH/LHB)	192	
	10/100/1000BASE-T		192	
Routing protocol	IPv4	Unicast	Static, RIP, RIPv2, OSPF, BGP4, policy routing, stub router (OSPF)	
		Multicast	PIM-SM, PIM-SSM, IGMPv2/v3	
	IPv6	Unicast	Static, RIPng, OSPFv3, BGP4+, policy routing, stub router (OSPFv3)	
		Multicast	PIM-SM, PIM-SSM, MLDv1/v2	
Layer 2 functions	VLAN		Port VLAN, Tag-VLAN (IEEE 802.1Q), protocol VLAN, MAC VLAN, Tag translation	
	Spanning tree protocol (STP)		STP (IEEE 802.1D), RSTP (IEEE 802.1w), PVST+, MSTP (IEEE 802.1s), loop guard, edge port, route guard, BPDU guard	
	Layer 3 cooperation functions		IGMPv2/v3snooping, MLDv1/v2snooping	
	Ring protocol		Autonomous Extensible Ring Protocol	
Network functions	Security functions		IEEE 802.1X authentication (port-based authentication/VLAN-based authentication/MAC-based authentication, MAC VLAN cooperation), authentication VLAN, Web authentication, filter (L2/IPv4/IPv6/L4), MAC authentication (fixed VLAN mode)	
	QoS		Flow detection (L2/IPv4/IPv6/L4), bandwidth monitoring (UPC), marking (DSCP/user priority), discarding control (tail drop), Shaping, Diff-serv, Hierarchical Shaper	
	Reliability/operability improvement functions		Load balance (IPv4/IPv6), VRRP(IPv4/IPv6), static polling (IPv4/IPv6), VRRP polling (IPv4/IPv6), Link aggregation (IEEE 802.3ad), jumbo frame, GSRP (L2/IPv4/IPv6), high-speed route switching function, Graceful Restart functions (BGP4, BGP4+, OSPF, OSPFv3), uRPF (loose/strict), storm control, IEEE802.3ah/UDLD, GSRP aware extended function, high-speed system switching function, L2 loop detection, network partition	
	L2-VPN		VLAN tunneling	
Operation management functions			SNMPv1/v2/v3 (agent function), MIB II, IPv6 MIB, RMON, syslog, ping, traceroute, SSHv1/v2[#2], telnet, ftp, NTP, IPv4 DHCP relay, IPv4 DHCP server, Prefix Delegation, RADIUS (IPv4/IPv6), sFlow, port mirroring, TACACS+, ON-API, AX-Config-Master	
Power saving functions	Static power saving functions		Power control of BCU/BSU/NIF (reboot required), NIF/port power supply OFF	
	Dynamic power saving functions		Power control of BCU/BSU (reboot not required), BCU/BSU Power Supply OFF, scheduling	
Redundancy			BCU (Basic Control Unit), BSU (Basic Switching Unit), Power Supply	
Equipment conditions	Input voltage		AC100 to 120V/200 to 240V	DC-48V
	Maximum input current (A)		40@100VAC 20@200VAC	79@-48VDC
	Maximum power consumption (W)		3,750	
	Maximum caloric value (kJ/h)		13,500	
	Outer dimensions W x D x H (mm)		443 x 544 x 395 (9U)	443 x 573 x 395 (9U)
	Weight (kg) (at maximum load)		82	

#1: When three BSUs (Basic Switching Unit) are in use #2: SSH function is subject to export control regulations, and may be excluded when exported.

⚠ Caution | For your safety, please be sure to read the *Hardware Instruction Manual* and the *Safety Guide* beforehand.

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