

Compact Full-Spec Fault-Tolerant Switches Inheriting High Availability and Power Saving Technology from AX6700S

The AX6600S series switches are chassis-type multilayer switches that support high reliability and power saving functions equivalent to those of AX6700S.



AX6604S



AX6608S

Large Capacity and Compact Size

- High performance triple play environment
 - ◎ Provides high packet forwarding performance even for short packets, and operation stability in a multimedia environment.
- Compact design
 - ◎ Compact size achieved by integrated installation of the operation management and packet forwarding units, similar to the AX6300S. Supports high-reliability and power-saving functions equivalent to those of AX6700S.

Network Virtualization (Network Partition)

- Simple and low-cost network virtualization
 - ◎ Capable of network integration and separation while maintaining security and independency 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

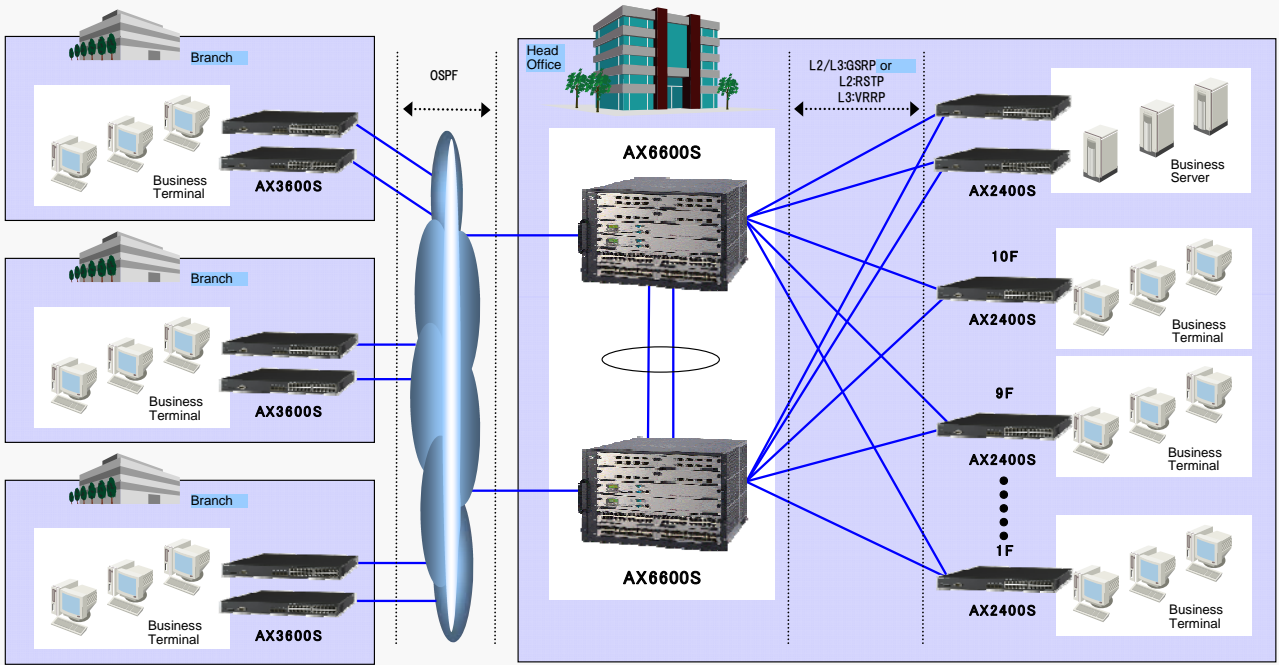
- High port density accommodation
 - ◎ Reduces a per-port price with the high port density accommodation of 1-gigabit and 10-gigabit lines with switching capacity of up to 384 Gbps.
 - 10 G Ethernet: accommodates up to 64 ports (AX6608S).
 - 1 G Ethernet: accommodates up to 192 ports (AX6608S).

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.

AX6600S Application Example

.....Core Switch for an External Information System.....



AX6600S Product Specifications

Model		AX6604S	AX6608S		
Performance	Maximum switching capacity	192Gbps ^{#1}	384Gbps ^{#1}		
	Maximum packet forwarding performance	120Mpps ^{#1}	240Mpps ^{#1}		
Port count	10GBASE-R	XFP(SR/LR/ER/ZR)	32		
	1000BASE-X	SFP(SX/SX2 /LX/BX/1H/LHR)	96		
	10/100/1000BASE-T		96		
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/v3 snooping, MLDv1/v2 snooping			
	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, command line interface			
Power saving functions	Static power saving functions	Power control of CSU/NIF (reboot required), NIF/port power supply OFF			
	Dynamic power saving functions	Power control of CSU (reboot not required), CSU Power Supply OFF, scheduling			
Redundancy		CSU (Control and Switching Unit), Power Supply			
Equipment conditions	Input voltage	AC100 to 120V/200 to 240V	DC-48V	AC100 to 120V/200 to 240V	DC-48V
	Maximum input current (A)	16@100VAC 8@200VAC	32@-48VDC	25@100VAC 12.5@200VAC	50@-48VDC
	Maximum power consumption (W)	1,500		2,400	
	Maximum calorific value (kJ/h)	5,400		8,640	
	Outer dimensions W x D x H (mm)	443 x 544 x 211 (5U)	443 x 573 x 211 (5U)	443 x 544 x 303 (7U)	443 x 573 x 303 (7U)
	Weight (kg) (at maximum load)	45		64	

#1: When two CSUs (Control and Switching Units) 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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