

Standard Fault-Tolerant Switches Focused on Cost Efficiency

The AX6300S series contains cost-effective, chassis-type multilayer switches that emphasize accommodation efficiency of 1-gigabit and 10-gigabit lines.



AX6304S

AX6308S

Compact Size and High Cost Efficiency

- High performance triple play environment
 - ◎ Provides high packet forwarding performance even for short packets, and operation stability in a multimedia environment.
- Compact design
 - ◎ Compact switches capable of accommodating 1-gigabit and 10-gigabit multi-port lines efficiently with a centralized packet forwarding engine architecture.
- High cost efficiency
 - ◎ Enables configuration of high performance networks at a low price in combination with small switches (AX2400S/AX3600S).

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.

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 engine architecture, reducing power consumption.
- Low power consumption mode
 - ◎ Capable of switching between normal power mode and low power consumption mode that suppresses switching performance.

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 192 Gbps.
 - 10 G Ethernet: accommodates up to 64 ports (AX6308S).
 - 1 G Ethernet: accommodates up to 192 ports (AX6308S).

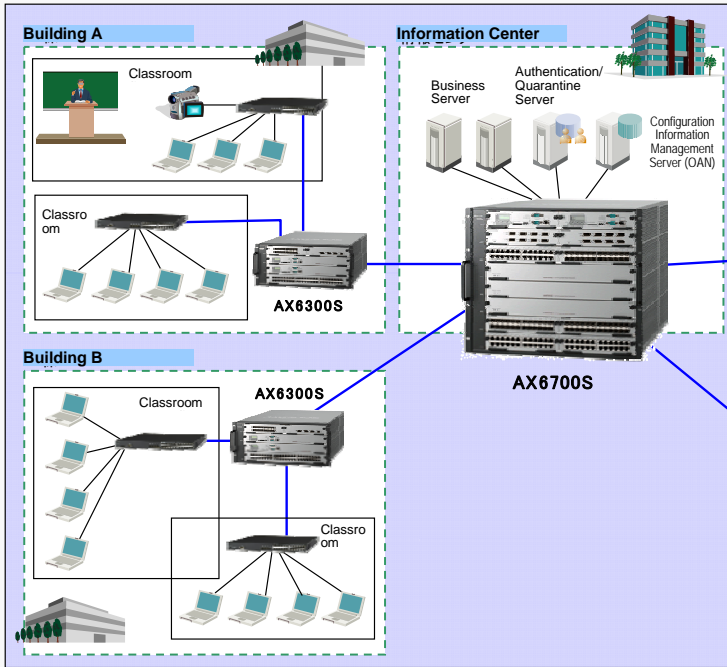
Lower Operation Management Costs

- 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 autonomous 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.

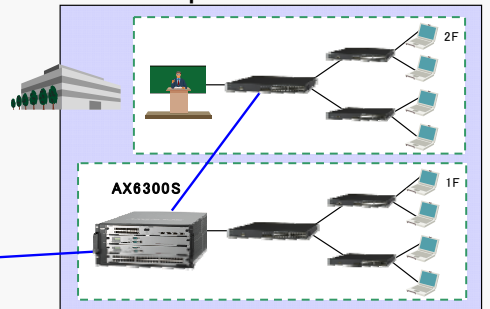
AX6300S Application Example

Configuration of Campus Network

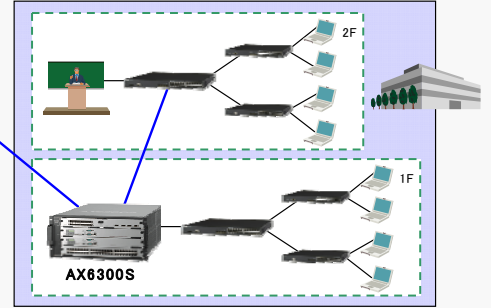
Center Campus



North Campus



South Campus



AX6300S Product Specifications

Model		AX6304S	AX6308S		
Performance	Maximum switching capacity	96Gbps	192Gbps		
	Maximum packet forwarding performance	60Mpps	120Mpps		
Port count	10GBASE-R	XFP(SR/LR/ER/ZR)	32		
	1000BASE-X	SFP(SX/SX2/LX/BX/LH/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		
Routing protocol	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			
Network functions	Ring protocol	Autonomous Extensible Ring Protocol			
	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			
Operation management functions	L2-VPN	VLAN tunneling			
		SNMPv1/v2/v3 (agent function), MIB II, IPv6 MIB, RMON, syslog, ping, traceroute, SSHv1/v2 ^{#1} , 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 function	Static power saving functions	Power control of MSU/NIF (reboot required), NIF/port power supply OFF			
Redundancy		Power Supply, MSU (Management and Switching Unit)			
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)
	Weight (kg) (at maximum load)		45		64

#1: 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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