



AP SGXQ7200-48X2Q data center 40G switch

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Product Overview

AP SGXQ7200-48X2Q data center 40G switch uses advanced hardware and software architecture design, support built-in modular 1+1 redundant power supplies, 4+1 redundant fans, cross ventilation and wind direction adjustable. It has 48*10GE SFP+ ports and 6*40G QSFP+ ports.

AP SGXQ7200-48X2Q is ideal for cloud computing data center server access and core switch of small to medium datacenter. For campus or other large network, AP SGXQ7200-48X2Q could also be deployed at aggregation or core layer as its high performance and reliability.

Description

- 48 x 10GSFP+ and 6x 40GQSFP
- AC+AC PowerSupply
- 1 console,1 USB, 1RJ45 managementport
- Forwarding performance:1071Mpps
- Switching capacity:1440Gbps



Key Features and Highlights

High Performance and scalability:-

With high switching capacity, AP SGXQ7200-48X2Q supports wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols.

The 10 Gigabit Ethernet connectivity of AP SGXQ7200-48X2Q is accomplished via a hot-pluggable 10 Gigabit SFP+ transceiver which supports distance up to 300 meters over multi-mode fiber and 10 to 40km over single-mode fiber (The distance depends the optical module chosen).

High Reliability:-

SG7200 series support modular 1+1 redundant power supplies and 4+1 redundant fans. Business won't be interrupted in case replacing power supplies and fans. System supports dual images. Even though the primary image was destroyed, system will still boot via backup image normally.

VSF (Virtual Switch Framework):-

As new generation data center switch, SG7200 support VSF which not only guarantees the flexibility, but also enhanced the scalability of datacenter network.

Flex Resource:-

Flex Resource is able to allocate, recover and reallocate hardware resource dynamically according to demand. It can increase the utilization of the hardware resource.

Rich L3 Features:-

AP SGXQ7200-48X2Q delivers high-performance, hardware-based IP routing. RIP, OSPF and BGP provide dynamic routing by exchanging routing information with other Layer 3 switches and routers. With AP SGXQ7200-48X2Q, customers could easily achieve Policy based Route (PBR), which is important when they need multi exit application.

MPLS/VPLS:-

AP SGXQ7200-48X2Q supports MPLS L3 VPN/MPLS L2 VPN(VPLS) and helps customer to construct more secure/extendable network. With max.255 VRF instances, AP SGXQ7200-48X2Q series could be deployed as P & PE devices, guarantees the variety of services.

Abundant IPv6 Support:-

AP SGXQ7200-48X2Q supports IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing and the need for larger addressing and higher security becomes critical, AP SGXQ7200-48X2Q will be a right product to meet the requirement. AP-SGXQ7200-48X2Q passed IPv6 form Phase II certification, which is the best proof of the application.

Strong Multicast:-

AP SGXQ7200-48X2Q supports abundant multicast features such as IGMPv1/v2/v3 snooping and fast leave and IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM and even MSDP. With Multicast VLAN Register (MVR), multicast receiver/sender control and illegal multicast source detection functions, AP-SGXQ7200-48X2Q provides great application experience for customer.

Specification

Item	AP SGXQ7200-48X2Q
Physical port	48 * 10GSFP+ and 6*40GQSFP
Management port	Console port RJ45 10/100/1000Mbps RJ45 Ethernet Management port USB2.0 Management port
Performance	
Switching Capacity	1440Gbps
Forwarding Rate	1071Mpps
MAC Address	96K(standard)/32K(route)/288K(bridge), UFT configuration, default is standard
ARP Table	16k
Routing Table	16k
Physical	
Dimension(W*H*D)	433.8mm*44mm*550mm
Relative Humidity	10%~90% non-condensing
Temperature	Working 0°C~50°C, storage -40°C~75°C
Power Input	AC:100~240V, 50~60Hz
Power Supply	1+1 Modular Redundant
Main Features	
L1,L2 Features	IEEE802.3(10Base-T), IEEE802.3u(100Base-TX), IEEE802.3z(1000BASE-X)
	IEEE802.3ab(1000Base-T), IEEE802.3ae(10GBase), IEEE802.3x
	IEEE802.3ak(10GBASE-CX4)
	IEEE 802.3ba
	12k Jumbo Frame
	Port Loopback Detect
	LLDP and LLDP-MED
	UDLD
	802.3ad LACP, max 128 group trunks with max 8 ports for each trunk
	LACP Load Balance
	N:1 Port Mirroring
	RSPAN
	ERSPAN
	IEEE 802.1d (STP)
	IEEE 802.1w (RSTP)
	IEEE 802.1s (MSTP)

Specification

Item	AP SGXQ7200-48X2Q
L2 Features	RootGuard
	BPDUGuard
	BDPUTunnel
	802.1Q,4096VLAN
	MACVLAN,VOICEVLAN,PVLAN,ProtocolVLAN,MulticastVLAN
	QinQ,SelectiveQinQ,FlexibleQinQ
	GVRP
	N:1VLANTranslation
	Broadcast/Multicast/UnicastStormControl
	IGMPv1/v2/v3Snoopingand L2Query
	ND Snooping
	MLDv1/v2Snooping
	Static Routing, RIPv1/v2, OSPFv2,
	BGP4OSPFv3,BGP4+
L3 Features	OSPF Multiple
	ProcessLPMRouting
	Policy-based Routing (PBR) for IPv4 and IPv6VRRP
	URPF,
	ECMPBFD
	IGMPv1/v2/v3,IGMPProxy,
	DVMRP,PIM-DM,PIM-SM,PIM-SSM,anycastRP,MSDP
	Static Multicast
	RouteMulticastReceiveControl
	IllegalMulticastSourceDetection
	ARPGuard,LocalARPProxy,ProxyARP,ARPBinding,GratuitousARP,ARPLimit
	AntiARPCheat, AntiARPScan
	DNSClient
	GRE Tunnel
IPv6	6to4 Tunnel, Configured Tunnel, ISATAP Tunnel, GRE TunnelICMPv6,ND,DNSv6
	IPv6 LPM Routing, IPv6 Policy-Based Routing (PBR)IPv6VRRPv3,IPv6URPF, IPv6RA
	RIPng,OSPFv3,BGP4+
	MLDSnooping,IPv6multicastVLAN
	MLDv1/v2,PIM-SM/DM forIPv6,IPv6AnycastRP,IPv6ACL, IPv6QOS
MPLS	MPLS,VRF,LDP
	MPLSL3VPN, MPLS L2VPN(VPLS),VPWS

Specification

Item	AP SGXQ7200-48X2Q
QoS	8 Queues SWRR,SP,WRR,DWRR,SDWRR,WRED Traffic Classification Based on 802.1p CoS, ToS, DiffServ DSCP, ACL, port number TrafficShaping PRIMark/Remark
ACL	IPACL,MACACL,IP-MACACL StandardandExpanded ACLBasedonsource/destinationIPorMAC,IPprotocol, TCP/UDPPort,DSCP,ToS,IPPrecedence),VLAN,Tag/Untag,CoS REDIRECTandaccounting-basedACL Rulescan be configuredtoport,VLANTimerangedACL
Security	802.1xAAA Port,MACbasedauthenticationAccounting based on time length and trafficGuestVLANandAutoVLAN
	RADIUSforIPv4andIPv6
	TACACS+forIPv4and Ipv6
	MAB
DHCPv4/v6	DHCPServer/ClientforIPv4/IPv6DHCPRel ay/Option 82 DHCP Snooping/Option82
TrafficMonitor	SFlowTrafficAnalysis
Security NetworkManagement	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6Syslog and externalSyslog server HTTPSSL SNMP MIB, SNMP TRAPFTP/TFTP SNTP/NTPRMOM1,2,3, 9 Authentication by radiusSSHv1/v2 Dualfirmwareimages/Configurationfiles 802.3ahOAM, 802.1agOAM
DataCenter Features	VSF(VirtualSwitchFramework)