

# CS6200-8G24S2Q-EI Dual Stack 40G Ethernet Routing Fiber Switch



**CS6200-8G24S2Q-EI**

## ■ Product Overview

CS6200-8G24S2Q-EI next-generation 40G stackable routing switch has advanced hardware and software architecture design, built-in dual redundant power supplies. These switches provide high availability, scalability, security, energy efficiency, and ease of operation with innovative features such as VSF and redundant power supplies. It is ideal for high-density aggregation or core layer as its high performance, availability and reliability.

## ■ Key Features and Benefits

### ➤ Performance and Scalability

With high switching capacity, CS6200-8G24S2Q-EI series support wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols.

The 40 Gigabit Ethernet connectivity of CS6200-8G24S2Q-EI is accomplished via a hot-pluggable 40 Gigabit QSFP+ transceiver which supports distance up to 300 meters over multimode fiber and 10 to 40km over single-mode fiber(The distance depends the optical module chosen).

### ➤ VSF(Virtual Switch Framework)

Virtual Switch Framework can virtualize multiple DCN switches into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of virtualized device are greatly enlarged by times under VSF. VSF also simplifies management work for network administrator and provides more reliability.

### ➤ Rich L3 Features

CS6200-8G24S2Q-EI 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 CS6200-8G24S2Q-EI, customers could easily achieve Policy based Route(PBR), which is important when they need multi exit application.

### ➤ Strong Multicast

CS6200-8G24S2Q-EI supports abundant multicast features. In Layer 2, such as IGMPv1/v2/v3 snooping and fast leave. L3 multicast protocols such as IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM and even MSDP. With Multicast VLAN Register (MVR), multicast

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receiver/sender control and illegal multicast source detect functions; CS6200-8G24S2Q-EI provides great application experience for customer.

### ➤ **Easy High Reliability network**

MRPP is Multi-layer Ring Protection Protocol, which is DCN's private fast Ethernet ring protocol. Comparing to spanning tree protocol, it has advantages of fast convergence, simple protocol calculation, less system resources cost and so on, which can improve the reliability of Ethernet network operation.

### ➤ **Comprehensive QoS**

With 8 queues per port, CS6200-8G24S2Q-EI enable differentiated management of up to 8 traffic types. The traffic is prioritized according to IEEE802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

CS6200-8G24S2Q-EI also supports Bi-directional rate-limiting, per port or traffic class, preserves network bandwidth and allows full control of network resources.

### ➤ **Enhanced Security**

IEEE 802.1X port-based access control and MAC-based access control ensure all users are authorized before being granted access to the network.

Ingress/Egress Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers information. And for some services are based on time, the product can support time based ACL to match the requirement.

Secure Shell (SSH) encrypts network management information via Telnet providing secure network management.

RADIUS Authentication enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch.

### ➤ **Abundant IPv6 Support**

CS6200-8G24S2Q-EI supports IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing the need for larger addressing and higher security become critical, CS6200-8G24S2Q-EI will be a right product to meet this requirement.

### ➤ **Green-Energy**

Temperature monitoring, alarming, automatic cooling, energy saving features are realized on CS6200-8G24S2Q-EI. According to the temperature monitoring, Fan speed can be adjusted to reduce energy consumption and noise.

## ■ **Specification**

Item	CS6200-8G24S2Q-EI
Physical port	8 x 10/100/1000BaseT + 24 x 10GE(SFP+) + 2 x 40GE(QSFP+)
Management port	1 x RJ45 Ethernet Management port
	1x Console port
	1x USB2.0 interface

Performance	
Switching Capacity	656Gbps
Throughput	488Mpps
Jumbo Frame	10K
MAC Address	32K
ARP Table	16K
Routing Table	16K
ACL Table	3K
L3 Interface	Max 2K
Physical	
Dimension (W*H*D)	440mm x 44mm x 320mm
Relative Humidity	10%~90% non-condensing, storage 95%
Temperature	Working 0°C~50°C, storage -40°C~70°C
Power Supply	AC: 100~240VAC, 50~60Hz + 48VDC
Power Consumption	<85W
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
	Port loopback detection 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
	IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP) Root Guard BPDU Guard
	802.1Q, 4K VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ GVRP N:1 VLAN Translation Broadcast / Multicast / Unicast Storm Control
	IGMP v1/v2/v3 Snooping and L2 Query ND Snooping MLDv1/v2 Snooping

	Port Security
	Flow Control: HOL, IEEE802.3x
	Bandwidth Control
L3 Features	<p>Static Routing,RIPv1/v2,OSPFv2,BGP4</p> <p>OSPFv3, BGP4+</p> <p>OSPF multiple process</p> <p>LPM Routing</p> <p>Policy-based Routing(PBR) for IPv4 and IPv6</p> <p>VRRP</p> <p>URPF,</p> <p>ECMP</p> <p>BFD</p>
	<p>IGMP v1/v2/v3, IGMP Proxy,</p> <p>DVMRP,PIM-DM,PIM-SM,PIM-SSM, Any Cast RP, MSDP</p> <p>Static Multicast Route</p> <p>Multicast Receive Control</p> <p>Illegal Multicast Source Detect</p>
	<p>ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit</p> <p>Anti ARP/NDP Cheat, Anti ARP/NDP Scan</p>
	DNS Client, DNS Relay
	GRE Tunnel
IPv6	<p>ICMPv6,ND,DNSv6</p> <p>IPv6 LPM Routing,IPv6 Policy-based Routing(PBR)</p> <p>IPv6 VRRPv3,IPv6 URPF,IPv6 RA</p> <p>RIPng,OSPFv3,BGP4+</p> <p>MLD Snooping,IPv6 Multicast VLAN</p> <p>MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Any Cast RP, IPv6 ACL, IPv6 QoS</p>
QoS	<p>8 Queues</p> <p>SWRR, SP, WRR, DWRR, SDWRR</p> <p>Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number</p> <p>Traffic Policing</p> <p>PRI Mark/Remark</p>
ACL	<p>IP ACL ,MAC ACL,IP-MAC ACL</p> <p>Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS</p> <p>REDIRECT and Accounting based ACL</p> <p>Rules can be configured to port, VLAN, VLAN routing interfaces</p> <p>Time Ranged ACL</p>

Security	802.1x AAA
	Port, MAC based authentication
	Accounting based on time length and traffic
	Guest VLAN and auto VLAN
	RADIUS for IPv4 and IPv6
	TACACS+ for IPv4 and IPv6
	MAB
DHCPv4/v6	DHCP Server/Client for IPv4/IPv6
Traffic Monitor	DHCP Relay/Option 82
	DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Management	Network
	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6
	Syslog and external Syslog Server
	HTTP SSL
	SNMP MIB, SNMP TRAP
	FTP/TFTP
	SNTP/NTP
	RMOM 1,2,3,9
	Authentication by Radius/TACACS
	SSH v1/v2
	Dual firmware images/ Configuration files
	802.3ah OAM, 802.1ag OAM
Data Center Features	VSF(Virtual Switch Framework)

The contents marked with “\*” need future upgrade or are under development

## ■ Order Information

Product	Description
CS6200-8G24S2Q-EI	40G Ethernet Routing Switch, 8 x 10/100/1000Base-T (RJ45) + 24 x 10GE (SFP+) + 2 x 40GbE (QSFP+), AC + 48VDC power supply
AOC-SFPX-10M	AOC cable with 2 10G(SFP+) modules, 10m, suitable for SFP+ ports on same model of switch, can be used for VSF
DAC-SFPX-3M	DAC cable with 2 10G(SFP+) modules, 3m, suitable for SFP+ ports on same model of switch, can be used for VSF
DAC-QSFP-5M	DAC cable with 2 40G(QSFP) modules, 5m, suitable for QSFP ports on same model of switch, can be used for VSF

## ■ Contact us

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