

# 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 © 2018 Yunke China Information Inc All rights reserved. This document is DCN Public Information

All specifications are subject to change without further notice. All features with \* mark will be available by firmware upgrade.



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	16K	
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	
	AC: 100~240VAC, 50~60Hz	
Power Supply	+ 48VDC	
Power Consumption	<85W	
	Main 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	
	IEEEE802.1d(STP)	
	IEEEE802.1w(RSTP)	
=	IEEEE802.1s(MSTP)	
L1, L2 Features	Root Guard	
	BPDU Guard	
	802.1Q, 4K VLAN	
	MAC VLAN, Vocie 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 IEEE902.2v
	Flow Control: HOL, IEEE802.3x
	Bandwidth Control
	Static Routing,RIPv1/v2,OSPFv2,BGP4
	OSPFv3, BGP4+
	OSPF multiple process
	LPM Routing
	Policy-based Routing(PBR) for IPv4 and IPv6
	VRRP
	URPF,
	ECMP
L3 Features	BFD
	IGMP v1/v2/v3, IGMP Proxy,
	DVMRP,PIM-DM,PIM-SM,PIM-SSM, Any Cast RP, MSDP
	Static Multicast Route
	Multicast Receive Control
	Illegal Multicast Source Detect
	ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit
	Anti ARP/NDP Cheat, Anti ARP/NDP Scan
	DNS Client, DNS Relay
	ICMPv6,ND,DNSv6
	IPv6 LPM Routing,IPv6 Policy-based Routing(PBR)
IPv6	IPv6 VRRPv3,IPv6 URPF,IPv6 RA
11 10	RIPng,OSPFv3,BGP4+
	MLD Snooping,IPv6 Multicast VLAN
	MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Any Cast RP, IPv6 ACL, IPv6 QoS
	8 Queues
QoS	SWRR, SP, WRR, DWRR, SDWRR
003	Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number
	Traffic Policing
	PRI Mark/Remark
	IP ACL ,MAC ACL,IP-MAC ACL
	Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS,
A C I	IP Precedence), VLAN, Tag/Untag, CoS
ACL	REDIRECT and Accounting based ACL
	Rules can be configured to port, VLAN, VLAN routing interfaces
	Time Ranged ACL
	802.1x AAA
Security	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 Traffic Monitor	DHCP Server/Client for IPv4/IPv6
	DHCP Relay/Option 82
	DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6
	Syslog and external Syslog Server
	HTTP SSL
	SNMP MIB, SNMP TRAP
	FTP/TFTP
Security Network	SNTP/NTP
Management	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

For more detail information about DCN product, contact:

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