



Switch to a New Generation

ETHERNET DATA CENTRE SWITCHES

CS6500 SERIES













Full Layer 3 10Gb and 40Gb ports Modular power supply

OpenFlow networks

Features
without hiding
costs







E-mail sales@dcneurope.eu





FULL LAYER 3

- The CS6500 series provides powerful switches working in Layer 2 and Layer 3 offering up to 128,000 routing table entries.
- RIP, OSPF and BGP provide dynamic routing by exchanging route information with other layer 3 switches or routers.
- CS6500 series is equipped with a wide range of Protocol Independent Multicast (PIM) functions, including PIM-DM, PIM-SM, PIM-SSM and MSDP.

40/100 GIGABIT PORTS

- The CS6500 series offers up to 32 ports 100 Gigabit which can work as a redundant link working with various ring protection functions, effectively increasing scalability and network performance.
- Through the ability to split streams on QSFP and QSFP28 ports, this series devices allow 4x 10Gb transmission per each QSFP port or 4x 25Gb each port 100Gb.

MODULAR POWER SUPPLY

• The CS6500 series switches are equipped with redundant Hot-Swap power supplies and Hot-Swap fans to maintain continuous, uninterrupted network operation when replacing one of them.

SOFTWARE DEFINED NETWORK/OPENFLOW

- OpenFlow standard available in the CS6500 family switches, enables implementation of networks in the SDN (Software Defined Networking) architecture.
- OpenFlow is one of the most important projects in software-controlled networks.
- In the SDN concept, network management is transferred from the device to the central node the network controller. CS6500 series switches using OpenFlow enable the built of efficient and flexibly managed networks.

FEATURES WITHOUT HIDING COSTS

• With using switches of the CS6500 series you can be sure that the equipment which you are using has all available functionalities without the needs to purchase additional licenses.





	CS6510- 48S6Q-HI (R3)	cs6580- 4856cq-hi	CS6580- 32CQ-HI
Switch Classification	,	,	,
Layer 3 Connectivity	✓	✓	✓
1000/10GBase-X (SFP+)	48	<u>.</u>	
1000/10G/25GBase-X (SFP28)	•	48	-
40GBase-X (QSFP) 40G/100GBase-X (QSFP28)	6 -	<u>-</u> 6	32
(10/100/1000Base-T RJ45) - Mgmt OOB port	1	1	1
Console port - RS-232 (RJ45)	1 1	1	1
USB port Performance		<u>'</u>	
Switch fabric speed	1440 Gb/s	3600 Gb/s	6400 Gb/s
Forwarding rate	1071,42 Mp/s	2678,57 Mp/s	4761,90 Mp/s
Packet buffer Jumbo frames	16 MB 12 K	16 MB 9 K	16 MB 9 K
Junio Italies	96 K (standard)	40 K (standard)	40 K (standard)
MAC address table (1)	32 K (routee)	8 K (routee)	8 K (routee)
	288 K (bridgee) (4)	104 K (bridgee) 72 K (legacy) ⁽⁴⁾	104 K (bridgee) 72 K (legacy) ⁽⁴⁾
Multcast MAC address table	8 K	8 K	8 K
ACL table	4 K Ingress 1 K Egress	768 Ingress 512 Egress	768 Ingress 512 Egress
	8 K (standard)	32 K (standard)	32 K (standard)
Routing table (2)	16 K (routee)	128 K (routee) 8 K (brdigee)	128 K (routee) 8 K (brdigee)
	8 K (bridgee) ⁽⁴⁾	16 K (legacy) (4)	16 K (legacy) (4)
Multicast routing table (3)	4 K	4 K 32 K (standard)	4 K 32 K (standard)
ADD table	14 V	8 K (routee)	8 K (routee)
ARP table	16 K	32 K (bridge)	32 K (bridgee)
Number of VLAN interfaces (IP)	1 K	32 K (legacy) ⁽⁴⁾ 1 K	32 K (legacy) (4) 1 K
CPU clock	Quad-core - 2.4 GHz	Quad-core - 2,4 GHz	Quad-core - 2.4 GHz
Flash memory RAM memory	32 GB SSD 4 GB	32 GB SSD 16 GB	64 GB SSD 16 GB
Resilience and availability	4 GB	10 GB	10 GB
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	√	√	√
IEEE 802.3ad LACP	√	✓	✓
Virtual Cable Testing	√	√	√
DDM LLDP / LLDP-MED	√ √	<u>√</u>	√ √
VRRP	√ √	✓	√
Loop guard	<i>√</i>		√
ERPS (ITU-T G.8032)	✓	√	√
MRPP ULPP	√ √	<u>√</u>	√ √
VXLAN	- -	<u>√</u>	√ √
Traffic control			·
IEEE 802.3x Full duplex & Flow control	\checkmark	✓	\checkmark
802.1Q VLANs	4 K	4 K	4 K
Protocol-based VLAN Protocol-based VLAN	√ √	<u>√</u>	√ √
IP subnet based VLAN	<u>√</u>		√
Voice VLAN	√	√ ·	√ ·
Mac VLAN	√	✓	√
Super VLAN LACP algorithm of source/destination IP (load balance)	<u>√</u>	<u>√</u>	√ √
GVRP	✓ ✓	✓	√ √
802.1ad Vlan Stacking (QinQ)	√	√ √	√ √
Flexible QinQ	√	✓	√
Security			
Layer 2 MAC filtering BPDU Tunnel	<u>√</u>	<u>√</u>	✓ ✓
BPDU Tunnel BPDU Guard	√ √	<u>√</u>	✓ ✓
Login authentication and authorization by Radius and		√	√
Tacacs+ TACACS+ accounting/ auditing			
SSH v1/v2	√ √	<u>√</u>	√ √
DHCP/DHCPv6 snooping	√	√ √	√ √
IP/IPv6 Source Guard	√	√ 	√
Port security IEEE 802.1x port-based / mac-based	√ √	<u>√</u>	√ √
QoS	·	<u> </u>	<u> </u>
802.1p Priority Queues per Port	8	8	8
802.1p Queuing method	√ √	√	0 ✓
Trusted COS/TOS/IP Precedence/DSCP/Port number	√	√	√
Broadcast Storm Control	√	√	√
Rate Limiting, port based	√	<u>√</u>	✓
		√	√
Strict priority	<u>√</u>		✓
Strict priority Weighted Round Robin Weighted Deficit Round Robin	√ √ √	√ √	√ √
Strict priority Weighted Round Robin	✓	√	

⁽¹⁾ MAC address table shared for unicast and multicast (in 1:1 ratio)
(2) Routing Table for IPv4 shared with IPv6 (in 4:1 ratio)
(3) Routing Table shared for unicast and multicast (in 1:1 ratio)
(4) MAC address table and routing table assigned depending on the selected operating mode (standard, routee ,bridgee or legancy)





	CS6510- 48S6Q-HI (R3)	CS6580- 4856CQ-HI	cs6580- 32cq-HI
L2/L3 - Multicast			
Multicast VLAN	\checkmark	√	√
GMP v1,v2, v3	√	√	√
GMP Query	✓	√	√
GMP Snooping (v1,v2,v3)	√ ·		
GMP Snooping Fast Leave(v2,v3)	· /	· √	<u> </u>
PIM-DM/SM/SSM	· ✓	· √	· √
nycast RP	· ✓	·	<u> </u>
Pv6 MLD v1/v2 Snooping	√	√	
louting	V	V	· · · · · · · · · · · · · · · · · · ·
static routing IPv4 / IPv6	✓	✓	√
	· · · · · · · · · · · · · · · · · · ·		
tlP v1,v2 / RIPng	√	√	<u>√</u>
OSPF v2 / OSPF v3	√	√	<u>√</u>
GP / BGP4+	\checkmark	✓	√
ayer 3 IPv6			
Pv4/IPv6 Dual Protocol Stack	\checkmark	√	√
Pv6 address	✓	✓	✓
Pv6 Tunneling	✓	✓	√
Manageability			
GUI (Web)	✓	✓	✓
Telnet	<i></i>	· √	<u>,</u>
NMP v1/v2c/v3	· ✓	·	<u> </u>
FTP/FTP	√ ✓	√	
Configuration backup and restore	√ ✓	√	
Wielopoziomowy CLI	√ √	√	
DNS Client	√ √	√	√
HCP Client/Relay/Server	√	√	<u>√</u>
OHCP option 43/60/82	√	√	<u>√</u>
DHCPv6 option 37/38	✓	✓	✓
OHCPv6 Relay/Server	√	✓	√
SNTP / NTP	✓	√	√
Flow	✓	√	✓
Port Mirroring per IP/TCP/UDP	\checkmark	✓	✓
RSPAN	✓	✓	✓
ERSPAN	✓	✓	✓
Cluster	✓	✓	√
OpenFlow 1.0	✓	√	√
Stack (VSF)	√	√	√
Stack (VSF-HA)	√ ·	· ·	<u>.</u>
EEE 802.3ah EFM	<i></i>	√	✓
EEE 802.1ag CFM	√ √	<i></i>	
MIB	<u> </u>	·	
RFC1066 - TCP/IP-based MIB			
	√ ,	√	√
FC1213, 1157 – SNMPv2c/v3 MIB	√	√	<u>√</u>
RFC1493 – bridge MIB	√	√ 	<u>√</u>
FC2674 – bridge MIB extension	√	√	<u>√</u>
FC1643 – ethernet MIB	✓	✓	✓
FC1757 – RMON group 1,2,3,9	√	√	√
FC 2925 – Remote Management MIB	√	√	√
FC2233 - SMIv2 MIB	✓	✓	✓
Physical Phy			
	443 mm	438 mm	438 mm
imensions (Width x Height x Depth)	x 44 mm	x 44 mm	x 44 mm
	x 503 mm	x 473 mm	x 515 mm
perating temperature	0 °C ~ 45 °C	0 °C ~ 45 °C	0 °C ~ 45 °C
lumidity	10% - 90%	10% - 90%	10% - 90%
•	(no condensation)	(no condensation)	(no condensation)
Cooling	active	active	active
ans	5x Hot Swap	6x Hot Swap	6x Hot Swap
lectrical			
ower supply	230V AC, Hot Swap	230V AC, Hot Swap	230V AC, Hot Swap
ledundant power supply	230V AC, Hot Swap	230V AC, Hot Swap	230V AC, Hot Swap
Power consumption	≤ 305W	< 511W	< 550W



Zapraszamy do kontaktu! Więcej informacji: www.kreski.pl