

## ETHERNET AGGREGATION SWITCHES CS6200 SERIES



CS6200-28X-HI-24F

CS6200-8G24S2Q-EI



Full  
Layer 3



PIM Router



Extended  
Network  
Security



Stacking



Features  
without hiding  
costs



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## FULL LAYER 3

- The CS6200 series provides powerful switches working in Layer 2 and Layer 3 offering up to 16,000 routing table entries.
- RIP, OSPF and BGP provide dynamic routing by exchanging route information with other layer 3 switches or routers.
- With the CS6200 Series devices, customers can easily achieve Policy-Based Routing (PBR) functionality when multiple output applications are needed.

## PIM ROUTER

- The CS6200 series is equipped with a wide range of Protocol Independent Multicast (PIM) functions, including PIM-DM, PIM-SM, PIM-SSM and MSDP.
- Based on PIM router's function, the CS6200 series switch can act as a proxy server for multicast traffic. With having many television clients, we can limit the amount of traffic coming from the operator.

## EXTENDED NETWORK SECURITY

- The use of RADIUS / TACACS authentication prevents unauthorized logins such as harmful changes to the switch configuration.
- Ingress / Egress access control lists (ACLs) can be used to limit access to sensitive network resources by filtering packets based on information in the L2 / L3 / L4 headers. In addition, the CS6200 Series products can support an Access Control List operating within a predetermined time range (Time Based ACL).
- Network administrators can use Unicast Reverse Path Forwarding (uRPF) to limit harmful network traffic. This functionality allows the layer 3 switch to check the reachability of the source address in forwarded packets. This allows you to limit the appearance of fake addresses on the network.

## STACKING

- Virtual Switch Framework (VSF) can connect multiple DCN switches into one logical device, achieving sharing of information boards and data between different switches. By using this functionality, the devices in the stack have increased performance and the number of ports. VSF technology is also characterized by simplified management and greater operational reliability.

## FEATURES WITHOUT HIDING COSTS

- With using switches of the CS6200 series you can be sure that the equipment which you are using has all available functionalities without the needs to purchase additional licenses.

CS6200	28X-HI-24F	8624S2Q-EI
<b>Switch Classification</b>		
Layer 3	✓	✓
<b>Connectivity</b>		
10/100/1000Base-T (RJ45)	-	8
COMBO (10/100/1000Base-T (RJ45) or 100/1000Base-X (SFP))	16	-
100/1000Base-X (SFP)	8	-
1000/10GBase-X (SFP+)	4	24
40GBase-X (QSFP) <sup>(1)</sup>	-	2
QSFP – stacking port	2	-
(10/100/1000Base-T RJ45) – Mgmt OOB port	1	1
Console port – RS-232 (RJ45)	1	1
USB port	1	1
<b>Performance</b>		
Switch fabric speed	208 Gb/s	656 Gb/s
Forwarding rate	154,76 Mp/s	488,09 Mp/s
Packet buffer	4 MB	4 MB
Jumbo frames	16 K	16 K
MAC address table <sup>(2)</sup>	32 K (standard) 40 K (routee) 64 K (bridge) <sup>(6)</sup>	32 K
Multicast MAC address table	4 K	4 K
ACL table <sup>(3)</sup>	3 K	2,7 K Ingress 1 K Egress
Routing table <sup>(4)</sup>	16 K	16 K
Multicast routing table <sup>(5)</sup>		4 K
ARP table	48 K (standard) 40 K (routee) 16 K (bridge) <sup>(6)</sup>	16 K
Number of Vlan interfaces (IP)	1 K	1 K
CPU clock	Dual-core - 1 GHz	Dual-core – 1,25 GHz
Flash memory	32 MB SPI + 1 GB NAND	32 MB SPI + 128 MB NAND
RAM memory	1 GB	512 MB
<b>Resilience and availability</b>		
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	✓	✓
IEEE 802.3ad LACP	✓	✓
Virtual Cable Testing	✓	✓
DDM	✓	✓
LLDP / LLDP-MED	✓	✓
VRRP	✓	✓
Loop guard	✓	✓
ERPS (ITU-T G.8032)	✓	✓
MRPP	✓	✓
ULPP	✓	✓
<b>Traffic control</b>		
IEEE 802.3x Full duplex & Flow control	✓	✓
802.1Q VLANs	4 K	4 K
Port-based VLAN	✓	✓
Protocol-based VLAN	✓	✓
IP subnet based VLAN	✓	✓
Voice VLAN	✓	✓
Mac VLAN	✓	✓
Super VLAN	✓	✓
LACP algorithm of source/destination IP (load balance)	✓	✓
GVRP	✓	✓
802.1ad Vlan Stacking (QinQ)	✓	✓
Flexible QinQ	✓	✓
<b>Security</b>		
Layer 2 MAC filtering	✓	✓
BPDU Tunnel	✓	✓
BPDU Guard	✓	✓
Uwierzytelnienie i autoryzacja logowania poprzez RADIUS oraz TACACS+	✓	✓
TACACS+ accounting/ auditing	✓	✓
SSH v1/v2	✓	✓
DHCP/DHCPv6 snooping	✓	✓
IP/IPv6 Source Guard	✓	✓
Port security	✓	✓
IEEE 802.1x port-based / mac-based	✓	✓
<b>QoS</b>		
802.1p Priority Queues per Port	8	8
802.1p Queuing method	✓	✓
Trusted COS/TOS/IP Precedence/DSCP/Port number	✓	✓
Broadcast Storm Control	✓	✓
Rate Limiting, port based	✓	✓
Strict priority	✓	✓
Weighted Round Robin	✓	✓
Weighted Deficit Round Robin	✓	✓
Weighted Random Early Detection	✓	✓
Strict priority in Weighted Deficit Round Robin	✓	✓

<sup>(1)</sup> – All QSFP ports are able to be spread transmission for 4x 10Gb Ethernet per port<sup>(2)</sup> – MAC address Table shared for unicast and multicast (in 1:1 ratio)<sup>(3)</sup> – ACL Table shared for ingress and egress (in 1:1 ratio) – refers to CS6200-28X-HI-24F<sup>(4)</sup> – Routing Table for IPv4 shared with IPv6 (in 4:1 ratio)<sup>(5)</sup> – Routing Table shared for unicast and multicast (in 1:1 ratio)<sup>(6)</sup> – MAC address Table and ARP Table assigned depending on the selected operating mode (standard, routee or bridgee)

CS6200	28X-HI-24F	8G24S2Q-EI
<b>L2/L3 - Multicast</b>		
Multicast VLAN	✓	✓
IGMP v1,v2, v3	✓	✓
IGMP Query	✓	✓
IGMP Snooping (v1,v2,v3)	✓	✓
IGMP Snooping Fast Leave(v2,v3)	✓	✓
PIM-DM/SM/SSM	✓	✓
anycast RP	✓	✓
IPv6 MLD v1/v2 Snooping	✓	✓
<b>Routing</b>		
Static routing IPv4 / IPv6	✓	✓
RIP v1,v2 / RIPv6	✓	✓
OSPF v2 / OSPF v3	✓	✓
BGP / BGP4+	✓	✓
<b>Layer 3 IPv6</b>		
IPv4/IPv6 Dual Protocol Stack	✓	✓
IPv6 address	✓	✓
IPv6 Tunneling	✓	✓
<b>Manageability</b>		
GUI (Web)	✓	✓
Telnet / SSH	✓	✓
SNMP v1/v2c/v3	✓	✓
TFTP/FTP	✓	✓
Configuration backup and restore	✓	✓
Wielopoziomowy CLI	✓	✓
DNS Client	✓	✓
DHCP Client/Relay/Server	✓	✓
DHCP option 43/60/82	✓	✓
DHCPv6 option 37/38	✓	✓
DHCPv6 Relay/Server	✓	✓
SNTP / NTP	✓	✓
sFlow	✓	✓
Port Mirroring per IP/TCP/UDP	✓	✓
RSPAN	✓	✓
ERSPAN	✓	✓
Cluster	✓	✓
Stack (VSF)	✓	✓
Stack (VSF-HA)	-	-
IEEE 802.3ah EFM	✓	✓
IEEE 802.1ag CFM	✓	✓
<b>MIB</b>		
RFC1066 – TCP/IP-based MIB	✓	✓
RFC1213, 1157 – SNMPv2c/v3 MIB	✓	✓
RFC1493 – bridge MIB	✓	✓
RFC2674 – bridge MIB extension	✓	✓
RFC1643 – ethernet MIB	✓	✓
RFC1757 – RMON group 1,2,3,9	✓	✓
RFC2925 – Remote Management MIB	✓	✓
RFC2233 – SMIv2 MIB	✓	✓
<b>Physical</b>		
Dimensions (Width x Height x Depth)	440 mm x 44 mm x 350 mm	440 mm x 44 mm x 320 mm
Operating temperature	0 °C ~ 50 °C	0 °C ~ 50 °C
Working humidity	10% - 90% (no condensation)	10% - 90% (no condensation)
Cooling	active FAN's: 2	active FAN's: 3
<b>Electrical</b>		
PSU	M6200-AC-A	-
Power supply	230V AC, Hot Swap	230V AC
Redundant power supply	230V AC, Hot Swap	48V DC
Power consumption	≤ 90 W	≤ 85 W