



## CS6200-28X-HI-24F L3+ 10G Routing Switch

### Product Overview

CS6200-28X-HI-24F next-generation 10G stackable routing switch has advanced hardware and software architecture design, built-in modular 1+1 redundant power supplies. CS6200-28X-HI-24F provides high availability, scalability, security, energy efficiency, and ease of operation with powerful features such as VSF (**Virtual Switch Framework**), redundant power supplies and OpenFlow. It is ideal for high-density aggregation or core layer for campus network, ISP, and enterprise.

| Appearance  | Description  |
|---|--|
|  <p><b>CS6200-28X-HI-24F</b></p> | <ul style="list-style-type: none"> <li>● 16 x GbE Combo (GT/SFP) + 8 x GbE (SFP) + 4 x 10GbE (SFP+) + 2 x Stacking port</li> <li>● Redundant and modular AC+AC Power Supply</li> <li>● 1 console, 1 USB, 1 RJ45 management port</li> <li>● Forwarding performance: 155Mpps</li> <li>● Switching capacity: 208Gbps</li> </ul>   |
|  <p><b>M6200-AC-A</b></p>        | <ul style="list-style-type: none"> <li>● Dimensions (W x D x H): 191mm x 300mm x 78mm</li> <li>● Weight: 0.94 kg</li> <li>● Rated input voltage range: 100V AC to 240V AC 50/60 Hz</li> <li>● Maximum input voltage range: 90V AC to 264V AC, 47Hz to 63Hz</li> <li>● Maximum input current: 90V AC to 136V AC: 3A, 180V AC to 264V AC: 1.5A</li> <li>● Maximum output current: 12.5A</li> <li>● Rated output voltage: 12V</li> <li>● Rated output power: 150W</li> <li>● Hot-swap: supported</li> </ul> |

## Key Features and Highlights

### MPLS/VPLS

CS6200-28X-HI-24F supports MPLS L3 VPN/MPLS L2 VPN(VPLS) and helps the customer to construct a more secure/extendable network. With max.252 VRF instances, CS6200 series could be deployed as P & PE devices, guaranteeing the variety of services.

### VSF (Virtual Switch Framework)

Virtual Switch Framework can virtualize multiple CS6200-28X-HI-24F into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of the virtualized device is greatly enlarged by times under VSF. VSF also provides simplified management work for the network administrator and more reliability.

CS6200-28X-HI-24F has two hardware stacking ports that are specially used for VSF.

### OpenFlow

CS6200-28X-HI-24F supports OpenFlow1.0 standard protocol. OpenFlow network is increasingly becoming a trend as the core protocol of the SDN network. It makes the network easier programming OpenFlow brings high performance to datacenter users via a self-defined network. With OpenFlow, this product is ideal to build SDN test-bed for research institutes and SDN Experimental Bureau for large ISP and operator.

### Rich L3 Features

CS6200-28X-HI-24F 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 the CS6200 series, customers could easily achieve Policy-based Route (PBR), which is important when they need a multi exit application.

### Strong Multicast

CS6200-28X-HI-24F 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 receiver/sender control and illegal multicast source detect functions; the CS6200 series provides a great application experience for the customer.

### Easy High-Reliability network

MRPP is a 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, fewer system resources cost, and so on, which can improve the reliability of Ethernet network operation

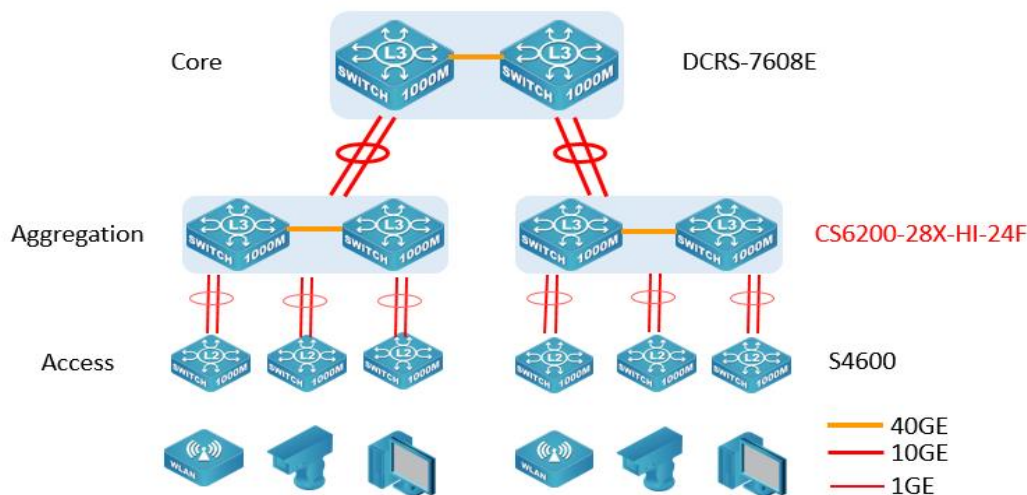
## Specifications

| Item                      | CS6200-28X-HI-24F   |   |
|---------------------------|---|---|
| <b>Physical port</b>      | 16 x GE Combo (GT/SFP) + 8 x GE(SFP) + 4 x 10GE(SFP+) + 2 x Stacking port   |   |
| <b>Management port</b>    | 10/100/1000Mbps RJ45 Ethernet Management port   |   |
|                           | 1 Console port  |   |
|                           | USB2.0 interface  |   |
| <b>Performance</b>        |   |   |
| <b>Switching Capacity</b> | 208Gbps   |   |
| <b>Forwarding Rate</b>    | 155Mpps   |   |
| <b>MAC Address</b>        | 32k(standard)/40k(routee)/64k(bridge) UFT configuration, default is standard mode   |   |
| <b>Routing Table</b>      | 16K   |   |
| <b>L3 Interface</b>       | Max 1K  |   |
| <b>Physical</b>           |   |   |
| <b>Dimension (W*H*D)</b>  | 440mm*44mm*350mm  |   |
| <b>Relative Humidity</b>  | 10%~90% non-condensing  |   |
| <b>Temperature</b>        | Working 0°C~50°C, storage -40°C~75°C  |   |
| <b>Power Supply</b>       | 2 power slots, 1+1 Modular Redundant  |   |
| <b>Main Features</b>      |   |   |
| <b>L1, L2 Features</b>    | 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), Auto MDI/MDIX |   |
|                           | Port loopback detection<br>LLDP and LLDP-MED<br>UDLD  |   |
|                           | 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk<br>LACP load balance   |   |
|                           | N:1 Port Mirroring<br>RSPAN, ERSPAN   |   |
|                           | IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP)<br>Root Guard<br>BPDU Guard<br>BPDU Tunnel  |   |
|                           | 802.1Q, 4096 VLAN<br>MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN<br>QinQ, Selective QinQ, Flexible QinQ<br>GVRP  |   |
|                           | N:1 VLAN Translation<br>Broadcast / Multicast / Unicast Storm Control   |   |
|                           | IGMP v1/v2/v3 Snooping and L2 Query, IGMP Proxy<br>ND Snooping<br>MLDv1/v2 Snooping   |   |
|                           | Port Security   |   |
|                           | Flow Control: HOL, IEEE802.3x<br>Bandwidth Control  |   |
|                           | <b>L3 Features</b>  | Static Routing, RIPv1/v2, OSPFv2, BGP4<br>OSPFv3, BGP4+ |
|                           |   | OSPF multiple processes<br>LPM Routing                  |
|                           |   | Policy-based routing (PBR) for IPv4 and IPv6<br>VRRP    |
| URPF,<br>ECMP             |   |   |
| BFD                       |   |   |

|                                    |  |
|------------------------------------|--|
|                                    | DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP<br>Static Multicast Route<br>Multicast Receive Control<br>Illegal Multicast Source Detect   |
|                                    | ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit<br>Anti ARP Cheat, Anti ARP Scan   |
|                                    | DNS Client, DNS Relay  |
|                                    | GRE Tunnel   |
| <b>IPv6</b>                        | 6to4 Tunnel, Configured Tunnel, ISATAP Tunnel, GRE Tunnel<br>ICMPv6, ND, DNSv6<br>IPv6 LPM Routing, IPv6 Policy-based Routing (PBR)<br>IPv6 VRRPv3, IPv6 URPF, IPv6 RA<br>RIPng, OSPFv3, BGP4+<br>MLD Snooping, IPv6 Multicast VLAN<br>MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS |
| <b>MPLS</b>                        | MPLS, VRF, LDP<br>MPLS L3 VPN, MPLS L2 VPN(VPLS), VPWS   |
| <b>QoS</b>                         | 8 Queues<br>SWRR, SP, WRR, DWRR, SDWRR, WRED<br>Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number<br>Traffic Policing<br>PRI Mark/Remark  |
| <b>ACL</b>                         | IP ACL, MAC ACL, IP-MAC ACL<br>Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS<br>Redirect and Statistics<br>Rules can be configured to port, VLAN, VLAN routing interfaces<br>Time Ranged ACL               |
| <b>Security</b>                    | 802.1x AAA<br>Port, MAC-based authentication<br>Accounting based on time length and traffic<br>Guest VLAN and auto VLAN<br>RADIUS for IPv4 and IPv6<br>TACACS+ for IPv4 and IPv6<br>MAB  |
| <b>DHCPv4/v6</b>                   | DHCP Server/Client for IPv4/IPv6<br>DHCP Relay/Option 82<br>DHCP Snooping/Option 82  |
| <b>Traffic Monitor</b>             | sFlow Traffic Analysis   |
| <b>Security Network Management</b> | CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6<br>Syslog and external Syslog Server<br>HTTP SSL<br>SNMP MIB, SNMP TRAP, RMOM 1,2,3,9<br>FTP/TFTP<br>SNTP/NTP<br>Authentication by Radius/TACACS<br>SSH v1/v2<br>Dual firmware images/ Configuration files<br>802.3ah OAM, 802.1ag OAM             |
| <b>Data Center Features</b>        | VSF (Virtual Switch Framework)<br>Openflow1.0 (support open controller Opendaylight, Floodlight, Ryu, Pox, etc.)   |

## Application

CS6200-28X-HI-24F is ideal deployed as aggregation switch providing Gigabit downlink and 10G uplink in a campus or enterprise network



## Order Information

| Product                  | Description  |
|--------------------------|--|
| <b>CS6200-28X-HI-24F</b> | 10G Ethernet Routing Switch, 16 x GE Combo (GT/SFP) + 8 x GE(SFP) + 4 x 10GE(SFP+) + 2 stacking port, modular power (2 power modules at most, 1+1 redundancy. Standard with no power module) |
| <b>M6200-AC-A</b>        | AC Power Supply Module (150W) for CS6200-28X-HI-24F, 100V-240V. Could be purchased alone as accessory  |