

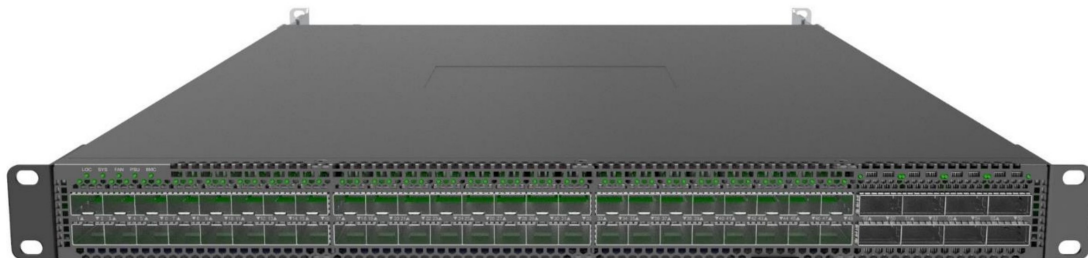
Data Center Switch DS610 Product Manual

Version:1.0

Products Description

The DS610 is a new-generation data center switch. It provides Layer 2 and Layer 3 full-line speed data exchange and supports 48×100GE ports and 8×400GE uplink ports. The DS610 meets the high performance, high availability, and elastic network requirements of enterprise and cloud computing data center applications. It can be deployed as a top-of-cabinet switch or in a 100GE/400GE distributed backbone network to form a data center network with non-blocking CLOS architecture.

The DS610 provides high reliability hardware design for data center application scenarios, including hot swappable AC power supply in 1+1 redundancy and fan module in 5+1 redundancy. In addition, it provides forward and backward heat dissipation.



DS610 front view



DS610 rear view

Product Features

1. Performance

- ◆ Ports: 48 x10/25GE, 8 x 40/100GE
- ◆ 2/3 layer wire speed forwarding
- ◆ 40G/100G port: Supports 4x10G/4x25G mode

2. Data center optimization design

- ◆ Each port supports a virtual output queue
- ◆ Hot swappable power supply with 1+1 redundancy design
- ◆ 4+1 redundantly designed hot-swappable fan modules
- ◆ Easy to install

3. High performance controller

- ◆ x86 architecture COM-e modules
- ◆ Supports 16GB DDR4 memory with ECC
- ◆ Support 256GB SSD solid state drives, M.2 interface (SATA bus)
- ◆ Support for BMC, through which peripherals can be monitored and managed

4. The system supports the monitoring and recording functions of various events

- ◆ Voltage monitoring, support board level voltage monitoring
- ◆ Temperature monitoring
- ◆ Restart reason log

Product Specifications

Features	DS610
Port description	48x100GE DSFP and 8x400GE QSFPDD
Maximum number of 400GbE ports	8 ports
Maximum number of 100GbE ports	48 ports
Green Energy Saving	Support IEEE802.3az/ IEEE802.3bj
	Automatic port closing is supported
	Support timed port closing
Switching chip	Clounix CLX850080
Swap capacity	8000 Gbps
CPU	Intel Broadwell DE D-1627 4 cores, 2.9GHz
DDR	16GB DDR4 with ECC (dual channel 2*8 GB)
SSD storage	256GB SSD solid state drive
BMC	Support
100/1000Mbps management network port	1 each
RS-232 port	1 each
USB port	1 each
Hot swap power supply	2 (1+1 redundancy)
Hot swappable fan	6 sets (5+1 redundancy)
Heat dissipation mode	Forward back out
Case size mm (width * depth * height)	442 × 630 × 44 IP20 is water and dust resistant
Weight (kg)	10kg

Features	DS610
Power supply type	1300W AC
Input voltage range	100V ~ 240V AC, 50 / 60HZ
Power consumption of the machine	Static: TBD W
	Full load: TBD W
Operating temperature range	0°C ~ 45°C
Operating humidity (no condensation)	5% ~ 95%
Product certification	subject to re-certification according to end-customer requirements
Level of protection	Power port: GR-1089, differential mode/common mode 6kV
	4K vlans are supported
L2 function	Support for IEEE 802.3ad
	Support for static and dynamic link aggregation
	Support for Jumbo Frames
	PFCS support
	LLDP v1/v2 and LLDP MED are supported
	Supports MAC address learning and aging
	Support for port mirroring
	Support port splitting
	Support for IPv4/IPv6 dual-stack protocols
L3 function	BGP routing protocol is supported
	Support BGP MP and smooth restart
	Support for ARP protocol

Features	DS610
QoS	Support for DHCP relay agents
	Support for IP decryption (v4/v6)
	Support service levels
	Support for WRED(ECN)
ACL	Support for IPv4/v6, L2/L3
AAA	TACACS+ support
System	gRPC support
	RDMA support
	Support Syslog and Sysdump
	NTP support
	Support for incremental configuration
	Support for SONiC to SONiC upgrades
	Support for quick restarts
	Support for quick restarts
management	Support SNMP
	Support for critical resource monitoring