



RoHS compliant
CL-SW10G-48S/24S
High Density 48/24 SFP+ Ports
10G Ethernet L2 TOR Switches

Product Overview

The Carelink CL-SW10G-48S and CL-SW10G-24S are a family of 48- and 24-port 10G Ethernet L2 switches designed from the ground up to be deployed in medium to large data centers. With unmatched port density and speed, the CL-SW10G-48S/24S family is ideally suited for converged Ethernet applications such as 10 Gigabit Ethernet traffic aggregation and Fibre Channel over Ethernet (FCoE) storage solutions for LAN, SAN, and IPC networks.



Key Features and Benefits

Performance

The CL-SW10G-48S/24S family of high-density L2 10GbE switches are encased in a small 1U form factor. Featuring 48/24 10GbE SFP+ interfaces, the switches offer unparalleled switching capacity, making them an ideal solution for medium to large sized data centers.

The CL-SW10G-48S/24S switches are capable of 960/480 Gbps of network throughput, enabling them to fully support the demand for bandwidth as data centers transit from 1GbE to 10GbE.

Continuous Availability

Dual hot-swappable power supplies enable the system to continue operation even in the event of a single power supply failure. To ensure longevity, the CL-SW10G-48S/24S employs data center-friendly front to back cooling, dissipating unwanted heat efficiently and effectively.

Data Center Requirements

With Ethernet fast becoming the de facto standard for the interconnection of data center devices, the CL-SW10G-48S/24S is designed to overcome the challenges in a high-traffic-load environment, ensuring that traffic flows smoothly through the network without delay. The CL-SW10G-48S/24S family features:

- Jumbo frames up to 10K bytes
- 802.1Qau Quantized Congestion Notification (QCN)
- 802.1Qbb Priority Flow Control (PFC)
- 802.1Qaz Enhanced Transmission Selection (ETS)
- FCoE ACL and FIP snooping



RoHS compliant
CL-SW10G-48S/24S
High Density 48/24 SFP+ Ports
10G Ethernet L2 TOR Switches

P Energy Efficiency

The CL-SW10G-48S/24S switches are easy on the environment as well as your energy budget. At less than 3 watt per port, they are simply without peer. This level of performance is the result of an uncompromising design philosophy, utilizing:

- State-of-the-art packet processor
- Power supplies with greater than 90% efficiency
- Variable-speed fans
- Advanced physical layer design

Simple and Flexible Management

The CL-SW10G-48S/24S features both a user-friendly web interface and a command-line interface. SNMP-based management is also fully supported. When used in conjunction with ICMS, Carelink's own network management system, the task of monitoring and provisioning can be easily accomplished.

Features

Physical Ports

48/24 10 Gigabit SFP+ ports
1 RJ-45 console port
2 PSU slots for removable power supplies
1 slot for a removable fan tray

Performance

Switching Capability: 980/480 Gbps
Forwarding Rate: 714/357 Mpps
Packet Buffer Size: 4 MB
MAC Address Table: 32K

L2 Features

Auto-negotiation for port speed and duplex mode

Flow Control:

- IEEE 802.3x for full duplex mode
- Back-Pressure for half duplex mode

Spanning Tree Protocol:

- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- Per-VLAN Rapid spanning tree (PVRST)

VLANs support:

- Supports 4K VLANs
- Supports IEEE 802.1Q VLAN
- Port-based VLAN
- MAC based VLAN
- Protocol-based VLAN
- Support private VLAN edge
- GVRP



RoHS compliant
CL-SW10G-48S/24S
High Density 48/24 SFP+ Ports
10G Ethernet L2 TOR Switches

- Q-in-Q
- Support IGMP
- IGMP snooping v1/v2/v3
- IGMP querier
- IGMP immediate leave
- IGMP throttling
- IGMP filtering
- IFMPSNP leave proxy
- Supports multicast VLAN registration (MVR)
- Provides Link Aggregation
- Support IEEE 802.3ad
- Manual trunking (Static trunking)

QoS Features

- 8 priority queues per port/128 groups per system Priority queue scheduling scheme: strict priority, WRR L2/L3/L4 Traffic classification/Priority Management
- IEEE 802.1P (COS)
 - DSCP/ToS
 - TCP/UDP port number
- Per-port bandwidth management

Data Center Features

- FCoE
ACL and FIP snooping
802.1Qau Congestion Notification (QCN)
802.1Qaz Enhanced Transmission Selection (ETS)
802.1Qbb Priority Based Flow Control (PFC)

Security

- Supports L2/L3/L4 access control list User/Password protected system management terminal (SNMP, Telnet, Web)
Static port security (MAC based)
Dynamic port security (MAC based)*
Supports RADIUS authentication
Supports TACACS+ authentication
MAC-based authentication
- User name password authentication
 - Local authentication
- Remote authentications via RADIUS/TACACS+
Supports management interface access filtering
- SNMP
 - Web
 - Telnet
- Supports SSH v1.5/v2
Supports HTTPS/SSL
Supports IEEE 802.1x
- Port-based
 - MAC-based security*

Management

Switch Management:



RoHS compliant
CL-SW10G-48S/24S
High Density 48/24 SFP+ Ports
10G Ethernet L2 TOR Switches

- CLI via console port or Telnet
 - Web management
 - SNMP v1, v2c, v3
- Firmware & Configuration:
- Firmware upgrade via TFTP server
 - Dual firmware images
 - Multiple configuration files
- Configuration file upload/download via TFTP server
- Supports RMON (groups 1, 2, 3 and 9)
- Supports BOOTP, DHCP for IP address assignment
- Supports SNTP
- Event/Error Log/Syslog
- (Optional) ICMS, a powerful network management software that maximizes the managed capabilities of Carelink devices with:
- Topology Management
 - Performance Management
 - Configuration Management
 - Event Management
 - SNMP Management

Electromagnetic Compatibility

CE Mark
FCC Class A

Environmental Specifications

Temperature:

- IEC 68-2-14
- 0°C ~ 40°C (32°F~104°F) Standard Operating
- -40°C to 70°C (-40°F~158°F) Non-Operating

Humidity: 5% to 95% (Non-condensing)

Vibration: IEC 68-2-36, IEC 68-2-6

Shock: IEC 68-2-29

Drop: IEC 68-2-32

Mechanical

Dimensions (W x D x H): 440 x 596 x 44 mm (17.32 x 27.46 x 1.75 inches)
Weight: 10kg (22lbs)
LED Indicators: Port, Uplink, System, Diagnostic

Safety

CSA (CSA 22.2. NO 60950-1 & UL60950-1)
CB (IEC60950-1)