Content

Chapter 1 Introduction

1.1 Product Brief

1.1.1 Overview

DG-CS4550FF-28/IS Series switches are the next generation of 100Gb Ethernet routing switches. DG-CS4550FF-28/IS Series switches are based on 100Gb switching technology. It is particularly designed for kilomega server of data center to fetch in the scene in high consistency. It provides the cogent network sustentation for kilomega connecting to 100Gb scheme in data center and distripark network with the characteristic of high reliability, multiple redundancy, high consistency and flexible convergence proportion.

DG-CS4554FF-28/IS:

Figure 1-1 DG-CS4554FF-28/IS Switch

DG-CS4532FF-28/IS:

Figure 1-2 DG-CS4532FF-28/IS Switch

DG-CS4550FF-28/IS Series switches with advanced intelligent and secure features, can serve ideally as distribution layer switches for campus networks, enterprise networks and IP metropolitan networks; as well as core layer switches for small and medium-sized networks.

1.1.2 Features and Benefits

✧ Various Interfaces

DG-CS4554FF-28/ISswitch provides 48 25Gb SFP28 ports and 6 QSFP28 100Gb ports. Each QSFP28 port can be split into 4 25Gb SFP28 ports.

DG-CS4532FF-28/IS switch provides 32 100Gb SFP+ ports. Each QSFP28 port can be split into 4 25Gb SFP28 ports.

✧ Support 100Gb Ethernet

100Gb Ethernet which adopts full-duplex technology instead of low-speed, half-duplex CSMA/CD protocol, is a big leap in the evolution of Ethernet. 100Gb Ethernet can be deployed in star or ring topologies. With 100Gb Ethernet, DG-CS4550FF-28/IS Series switches provide broad bandwidth and powerful processing capacity. It is suitable for metropolitan networks and wide area networks. Using DG-CS4550FF-28/IS Series switches, users can simplify
network structures and reduce cost of network construction.

✧ Networking Protocols

DG-CS4550FF-28/IS Series switches support 802.1d/w/s, 802.1Q, 802.1p, 802.3ad, 802.3x, GVRP, DHCP and SNTP etc. The switches also support comprehensively the multicast protocols such as IGMP, DVMRP and PIM. Moreover, DG-CS4550FF-28/IS Series switches support RIPv1/2, OSPF and IPv6. All these protocols supported enable DG-CS4550FF-28/IS Series switches to meet the requirements of complex network constructions.

✧ ACL

DG-CS4550FF-28/IS Series switches support comprehensively ACL policies. The traffic can be classified by source/destination IP addresses, source/destination MAC addresses, IP protocols, TCP/UDP, IP precedence, time ranges and ToS. And various policies can be conducted to forward the traffic. By implementing ACL policies, users can filter the virus packets such as “Worm.Blaster”, “Worm.Sasser” and “Red Code” etc. DG-CS4550FF-28/IS Series switches also support IEEE802.1x port based access authentication, which can be deployed with RADIUS, to ensure the port level security and

block illegal users.

✧ QoS

DG-CS4550FF-28/IS Series switches fully support DiffServ Module. Users can specify a queuebandwidth on each port. WRR/SP/SWRR scheduling is also supported. DG-CS4550FF-28/IS Series support the port security. Users can deploy trusted CoS, DSCP, IP precedence and port priority. User can also modify packets' DSCP and COS values. The traffic can beclassified by port, VLAN, DSCP, IP precedence and ACL table. User can also modify packets' DSCP and IP precedence values. Users can specify different bandwidths for voice/data/video to customize different qualities of service.

✧ 3D-SMP Ready

DG-CS4550FF-28/IS Series are up to the mustard of Self-defending security region management strategy according to Digital China Netware. It is supported interaction with some security system such as firewall, IDS, etc. It can defense the virus and aggress effectively from the extranet and internet. Thus enhance the security and stability of the network-wide.

✧ Perfect Web Management.

DG-CS4550FF-28/IS Series support SNMP, In-band and Out-of band Management, CLI and WEB interface and RMON. It can mail the correlative sensitive information to the administrator abide by SMTP protocol. DG-CS4550FF-28/IS Series support SSH protocol, ensure the configuration management security of the switch. It is adopted the Digital China centralized web management system 'DCLM2.0' for unified management expediently and compactly.

✧ MPLS Ready

DG-CS4550FF-28/IS Series supports MPLS VPN which be used to metropolitan area network and wide area network and processes the hardware wire speed forward. It is a box switch that IPv6 and MPLS implement high-performance wire speed forward at the same time, and provides more help for building the grand IP network.

DG-CS4550FF-28/IS Series supports LDP function and MPLS VPN (it can access the public network), and it can be deployed as PE and P.

1.2 Description of Hardware

1.1.3 Front Panel

1. Front Panel Diagram

The front panel of DG-CS4554FF-28/ISswitch includes 48 25G optical port,6 100G optical port,1 10/100/1000Base-T ETHERNET port,1 USB2.0 port,1 reset button and 1 console port.

The front panel of DG-CS4554FF-28/ISis shown below:

Figure 1-3 Front Panel of DG-CS4554FF-28/IS

The front panel of DG-CS4532FF-28/IS switch includes 32 100G optical port,1 10/100/1000Base-T ETHERNET port,1 USB2.0 port,1 reset button and 1 console port.

The front panel of DG-CS4532FF-28/IS is shown below:

Figure 1-4 front panel of DG-CS4532FF-28/IS

1.1.4 Back Panel

The back panel of DG-CS4550FF-28/IS Series includes 2 alternating current of 220V (it providesredundancy backups) and 6 fan rabbets.

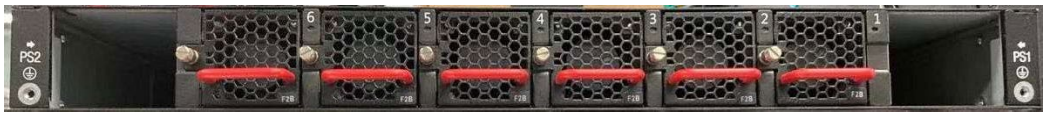

Fig 1-3 Back panel of DG-CS4550FF-28/IS Series (standard configuration)

Fig 1-4 Back panel of DG-CS4550FF-28/IS Series (full in)

2. Console description

DG-CS4550FF-28/IS Series switches provide a RJ-45 serial console port, the user perform thelocal and telnet configuration through this port.

The console port supports asynchronous mode, set the data bit as 8, the stop bit as 1, the parity bit as none, the default baud rate as 115200bps.

1.3 Status LEDs

The indicator light on front panel of DG-CS4554FF-28/IShas 48 SFP28 port indicator light, 6 QSFP28port indicator light, 2 power supply indicator light and system automatic diagnoses LED. The indicator light on front panel of DG-CS4532FF-28/IShas 32 QSFP28 port indicator light, 2 power supply indicator light and system automatic diagnoses LED. They are shown below and described in the following table.

Table 1-1 The explanation of indicator light of DG-CS4550FF-28/IS Series 100Gb routing switch

LED	Condition	Status
Diag (System indicate LED)	Green light always on	System is not walking properly or system is booting now
	Green LED blink	System work well
	Power off	System is not working
PSU1	Green	PSU1 power supply normally
	Amber	PSU1 power supply module has been inserted but does not power supply
	Power off	PSU1 power-supply module has not been inserted
PSU2	Green	PSU2 power supply normally
	Amber	PSU2 power-supply module has been instered but does not power supply
	Power off	PSU2 power-supply modele has not been inserted
FAN	Green	Fan work well
	Amber	Fan has been inserted but work abnormal
	Power off	Fan has not been inserted
LOC	Amber or Blue	Master device
	Power off	Not master device

Table 1-2 The explanation of the port indicator light

Port LED	Condition	Status
SFP28 port	Green led always shine or blink	The port is under the connection state or transmitting data with 25G speed
	Amber led always shine or blink	The port is under the connection state or transmitting data with 1/10G speed
	Power off	No connection or fail to connect
QSFP28 port	Blue led always shine	The port is under the connection state or transmitting data with 100g speed
	Amber led always	The port is under the connection state or
	shine or blink	transmitting data with 40G speed
	Power off	No connection or fail to connect
QSFP28 split into 4 25Gb SFP28 ports	White led always shine or blink	The port is under the connection state or transmitting data with 25g speed
	Green led always shine or blink	The port is under the connection state or transmitting data with 10G speed
	Power off	No connection or fail to connect

1.4 Port Description

DG-CS4554FF-28/ISprovides 48 25G SFP28 ports and 6 100G QSFP28 ports. DG-CS4532FF-28/IS provides 32 100G QSFP28 ports.

DG-CS4550FF-28/IS Series switches support the following SFP transceivers:

- SFP28-SR 25 G transceiver
- SFP28-LR 25 G transceiver
- QSFP28-LR 100 G transceiver
- QSFP28-SR 100 G transceiver
- QSFP-SR 40 G transceiver
- SFPX-SR 10 G transceiver
- SFPX-LR 10 G transceiver
- SFPX-ER 10 G transceiver
- SFPX-ZR 10 G transceiver
- SFP-SX-L（R3） 1 G transceiver
- SFP-LX-L（R3） 1 G transceiver
- SFP-LX-40-L(R2) 1 G transceiver
- SFP-LH-70-L(R2) 1 G transceiver
- SFP-LH-120-L（R2）1 G transceiver
- SFP-GT(R2) 1 G transceiver

- Each port description in the following:

Table 1-3 DG-CS4550FF-28/IS Series port description

Port mode	Spec
RJ-45 port	• 10/100/1000Mbps auto negotiation • MDI/MDI-X cable mode auto negotiation • 5 kinds of UTP: 100 m
SFP	• SFP-SX-L transceiver 1000Base-SX SFP(850nm,MMF,550m) • SFP-LX-L transceiver 1000Base-LX SFP(1310nm, SMF, 10km or MMF, 550m) • SFP-LX-20-L transceiver 1310nm light wave, 9/125um single mode fiber: 20km • SFP-LX-40 transceiver 9/125um single mode fiber: 40km • SFP-LH-70-L transceiver 9/125um single mode fiber: 70km • SFP-LH-120-L transceiver 9/125um single mode fiber: 120km
SFP+	• SFPX-SR： 10G-SFP+-MMF（850nm，62.5μm MMF 32m；50μm 500MHz/km MMF 85m；50μm 2000MHz/km MMF 300m）-LC • SFPX-LR： • 10G-SFP+SMF（1310nm，SMF，10km）-LC
DAC-SFPX	• 10G SFP+copper cable，3M • 10G SFP+copper cable，5M
AOC-SFPX	• 10G SFP+optical cable，5M • 10GSFP+optical cable，10M
DAC-QSFP	• 40G QSFP+copper cable，5M
QSFP+	• 40GBASE-CR4 transceiver Copper, 7m • 40GBASE-SR4 transceiver 850nm, MMF, OM3/OM4, 100m
SFP28	• SFP28-SR： 25G-SFP28-MMF（850nm，62.5μm MMF 32m；50μm

	500MHz/km MMF 85m；50μm 2000MHz/km MMF 300m）-LC ● SFP28-LR： ● 25G-SFP+SMF（1310nm，SMF，10km）-LC
QSFP28	● 100GBASE-CR4 transceiver Copper, 7m ● 1000GBASE-SR4 transceiver ● 850nm, MMF, OM3/OM4, 100m

DG-CS4554FF-28/ISprovides 6 QSFP+ ports. It enhances the flexibility of the network. User can select the cables according to the demand.

1.5 Power Supply Module

The whole appearance sketch map is below:

Fig 1-5 The sketch map

DG-CS4550FF-28/IS Series switch must have one power supply module. When two power supplyare at their position, it provides redundancy backups.

The maximum power is 650W, the import is 100VAC~240VAC and the export is 12V/52.9A. There is a fan and a handle for sticking in or pulling out the module on the back of the power supply. The power supply module supports the hot plug.

1.6 Fan Module

The whole appearance sketch map is below:

Fig 1-6 The sketch map

DG-CS4550FF-28/IS Series switch has 6 FAN in standard configuration. The rotate speed of fanadjusts itself adapt to the system temperature.

1.7 System Specifications

Table 1-4 System Specifications of DG-CS4550FF-28/IS Series

Type / Attribute	DG-CS4554FF-28/IS	DG-CS4532FF-28/IS
Dimension (W x D x H) (mm)	438.4 x 515 x 43.5	438.4 x 515 x 43.5
Weight	9.6 kg	10.87 kg
Fixed Port	48 SFP28 ports; 6 QSFP28 ports	32 QSFP28 ports
Management Port	1 RJ-45 serial console port	
Power Input	100~240VAC(50~60Hz) 190-310V(5-3A)	
System Consumption	<650W	
Operating Temperature	0°C~45°C	
Storage Temperature	-40°C~70°C	

Chapter 2 Installation Notice

To ensure the proper operation of DG-CS4550FF-28/IS Series and your physical security, please read carefully the following installation guide.

2.1 Environmental Requirements

- The switch must be installed in a clean area. Otherwise, the switch may be damaged by electrostatic adherence.
- Maintain the temperature within -5 to 50 °C and the humidity within 10% to 90%, non-condensing.
- The switch must be put in a dry and cool place. Leave sufficient spacing around the switch for good air circulation.
- The switch must work in the range of AC power input: 100 ~ 240VAC (50/60Hz).
- The switch must be well grounded in order to avoid ESD damage and physical injury of people.
- The switch should avoid the sunlight perpendicular incidence. Keep the switch away from heat sources and strong electromagnetic interference sources.
- The switch must be mounted to a standard 19'' rack or placed on a clean level desktop.

2.1.1 Dust and Particles

Dust is harmful to the safe operation of DG-CS4550FF-28/IS Series. Dust can lead to electrostatic adherence, especially likely under low relative humidity, causing poor contact of metal connectors or contacts. Electrostatic adherence will result in not only reduced product lifespan, but also increased chance of communication failures. The recommended value for dust content and particle diameter in the site is shown below:

Max Diameter (μm)	0.5	1	3	5
Max Density (particles/m^3)	1.4×10^5	7×10^5	2.4×10^5	1.3×10^5

Table 2-1 Environmental Requirements: Dust

In addition, salt, acid and sulfide in the air are also harmful to the switch. Such harmful gases will aggravate metal corrosion and the aging of some parts. The site should avoid harmful gases, such as SO_2, H_2S, NO_2, NH_3 and Cl_2, etc. The table below details the threshold value.

Gas	Average (mg/m³)	Max (mg/m³)
SO_2	0.2	1.5
H_2S	0.006	0.03
NO_2	0.04	0.15
NH_3	0.05	0.15
Cl_2	0.01	0.3

Table 2-2 Environmental Requirements: Particles

2.1.2 Temperature and Humidity

Although the switch is designed to use 6 fans, the site should still maintain a desirable temperature and humidity. High-humidity conditions can cause electrical resistance degradation or even electric leakage, degradation of mechanical properties and corrosion of internal components. Extreme low relative humidity may cause the insulation spacer to contract, making the fastening screw insecure. Furthermore, in dry environments, static electricity is liable to be produced and cause harm to internal circuits. Temperature extremes can cause reduced reliability and premature aging of insulation materials, thus reducing the switch's working lifespan. In the hot summer, it is recommended to use air-conditioners to cool down the site. And the cold winter, it is recommenced to use heaters.

The recommended temperature and humidity are shown below:

Temperature:		Relative humidity	
Long term condition	Short term condition	Long term condition	Short term condition
0 ~ 45°C	-5 ~ 50°C	15 ~ 85%	10 ~ 90%

Table 2-3 Environmental Requirements: Temperature and Humidity

Caution!

A sample of ambient temperature and humidity should be taken at 1.5m above the floor and 0.4m in front of the switch rack, with no protective panel covering the front and rear of the rack. Short term working conditions refer to a maximum of 48 hours of continued operation and an annual cumulative total of less than 15 days. Formidable operation conditions refers to the ambient temperature and relative humidity value that may occur during an air-conditioning system failure, and normal operation conditions should be recovered within 5 hours.

2.1.3 Power Supply

Before powering on the power supply, please check the power input to ensure proper grounding of the power supply system. The input source for the switch should be reliable and secure; a voltage adaptor can be used if necessary. The building's circuit protection system should include in the circuit a fuse or circuit-breaker of no greater than 240 V, 5A. It is recommended to use a UPS for more reliable power supplying. .

Caution!

Improper power supply system grounding, extreme fluctuation of the input source, and transients (or spikes) can result in larger error rate, or even hardware damage!

2.1.4 Preventing Electrostatic Discharge Damage

Static electric discharges can cause damage to internal circuits, even the entire switch. Follow these guidelines for avoiding ESD damage:

- Ensure proper earth grounding of the device;
- Perform regular cleaning to reduce dust;
- Maintain proper temperature and humidity;
- Always wear an ESD wrist strap and antistatic uniform when in contact with circuit boards.

2.1.5 Anti-interference

All sources of interference, whether from the device/system itself or the outside environment, will affect operations in various ways, such as capacitive coupling, inductive coupling, electromagnetic radiation, common impedance (including the grounding system) and cables/lines (power cables, signal lines, and output lines). The following should be noted:

- Precautions should be taken to prevent power source interruptions;
- Provide the system with a dedicated grounding, rather than sharing the grounding with the electronic equipment or lightning protection devices;
- Keep away from high power radio transmitters, radar transmitters, and high frequency strong circuit devices;
- Provide electromagnetic shielding if necessary.

2.1.6 Rack Configuration

The dimensions of the DG-CS4550FF-28/IS Series are designed to be mounted on a standard 19''rack, please ensure good ventilation for the rack.

- Every device in the rack will generate heat during operation, therefore vent and fans must be provided for an enclosed rack, and devices should not be stacked closely.
- When mounting devices in an open rack, care should be taken to prevent the rack frame from obstructing the switch ventilation openings. Be sure to check the positioning of the switch after installation to avoid the aforementioned.

Caution !

If a standard 19'' rack is not available, the DG-CS4550FF-28/IS Series can be placed on a clean level desktop, leave a clearance of 100mm around the switch for ventilation, and do not place anything on top of the switch.

2.2 Installation Notice

- Read through the installation instruction carefully before operating on the system. Make sure the installation materials and tools are prepared. And make sure the installation site is well prepared.
- During the installation, users must use the brackets and screws provided in the accessory kit. Users should use the proper tools to perform the installation. Users should always wear antistatic uniform and ESD wrist straps. Users should use standard cables and connecters.
- After the installation, users should clean the site. Before powering on the switch, users should ensure the switch is well grounded. Users should maintain the switch regularly to extend the lifespan of the switch.

2.3 Security Warnings

- When using SFP transceiver, do not stare directly at the fiber bore when the switch is in operation. Otherwise the laser may hurt your eyes.
- Do not attempt to conduct the operations which can damage the switch or which can cause physical injury.
- Do not install, move or disclose the switch and its modules when the switch is in operation.
- Do not open the switch shell.
- Do not drop metals into the switch. It can cause short-circuit.
- Do not touch the power plug and power socket.
- Do not place the tinder near the switch.
- Do not configure the switch alone in a dangerous situation,
- Use standard power sockets which have overload and leakage protection.
- Inspect and maintain the site and the switch regularly.

- Have the emergence power switch on the site. In case of emergence, switch off the power immediately.
- It is an A-level product. It can cause radio interference in the living environment. In this case, users need to take practical measures to the interference. Please remove all power line when cut off the power.

Caution!

Potential risk include: Electric leakage, Power supply arcing, Power line breakage, Imperfect earth, Overload circuit and Electrical short circuit. If electric shock, fire, electrical short circuit occurs, please cut off the electricity supply and alarm rapidly. Rescue the injured person in the contingency under inherently safe, give the injured person proper first aid treatment according to the injury state, and seek help from the Medical Emergency using various ways.

Chapter 3 Device Installation

3.1 Installation Preparation

3.1.1 Verify the Package Contents

Please unpack the shipping package and verify carefully the contents inside.

3.1.2 Required Tools and Utilities

The required tools and utilities are shown below:

- Cross screwdrivers
- Flat-blade screwdriver
- ESD wrist strap
- Antistatic uniform

Caution!

Users should prepare the required tools and utilities by themselves.

3.2 Device Installation

3.2.1 Installing the Switch

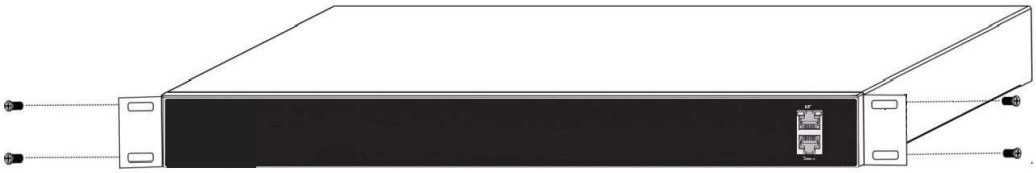

Figure 3-1 DG-CS4550FF-28/IS Series switch install sketch map on the rack using stock

Please mount DG-CS4550FF-28/IS Series on the 19'' rack as below:

1. Attach the 2 brackets on the DG-CS4550FF-28/IS Series with screws provided in the accessory kit.
2. Put the machine on the stock of the rack when installing because the machine is quite heavy.
3. Put the bracket-mounted switch smoothly into a standard 19'' rack. Fasten theDG-CS4550FF-28/IS Series to the rack with the screws provided. Leave enough space

switch for good air circulation.

Caution!

The brackets are used to fix the switch on the rack. They can't serve as a bearing. Because the device is heavy, we suggest installing the rack tray on the bottom of the switch. Do not place anything on top of the switch. Do not block the blowholes on the switch to ensure the proper operation of the switch. If there is no tray, add the lugs (The device provides it) on the back of the switch to make it fix on the rack.

There is no back horn iron in standard configuration. If users bought it, the figure of installation is below:

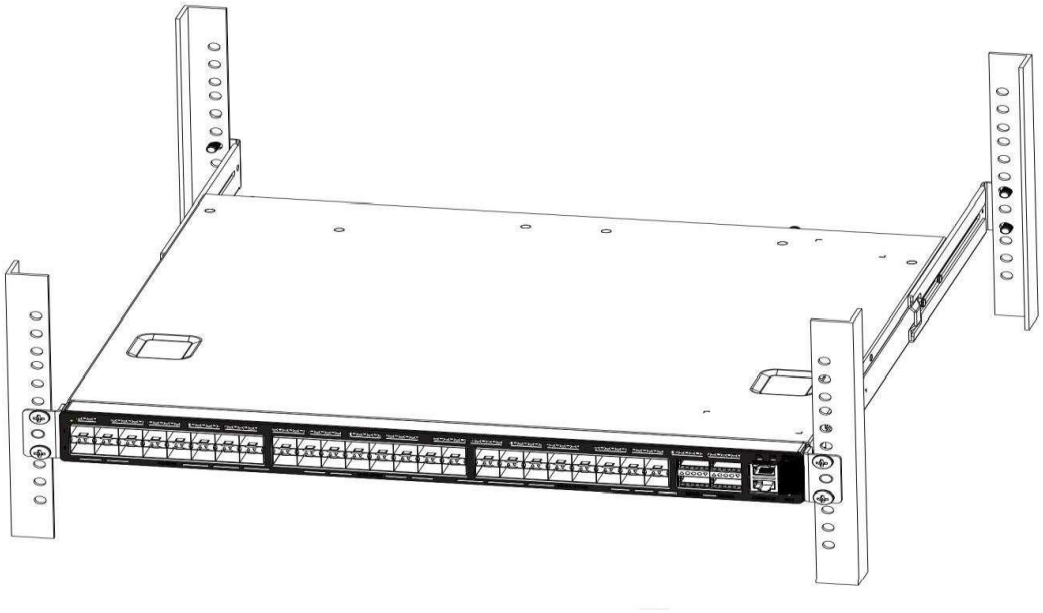

Figure 3-2 The figure of DG-CS4550FF-28/IS Series switch installing on the rack by using the front andback horn iron

3.2.2 Installing the Power Supply Module

DG-CS4550FF-28/IS Series switch supports 2 power supplies.

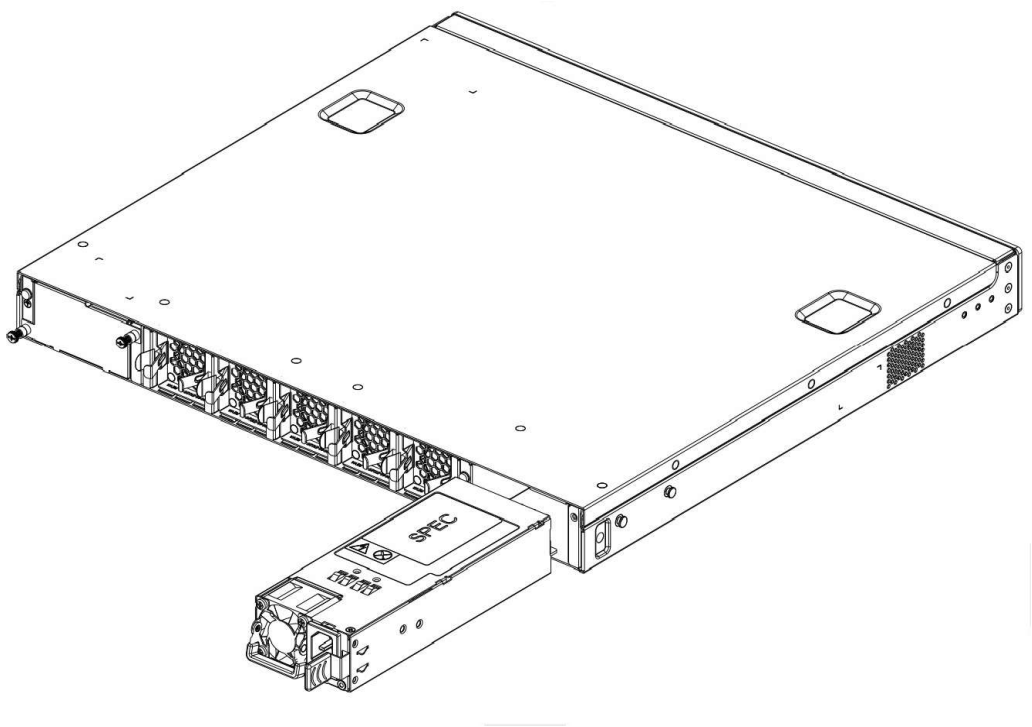

Figure 3-3 The figure of DG-CS4550FF-28/IS Series switch power supply installing

Please install the power supply module according to the following approach:

1. Take out the power supply module from the little packing box.
2. The golden finger is entad and aim at the power supply rabbet of the machine to insert to the end downwards. You can hear the lock sound of “click”.
3. Force the board on the side of AC cable bore to the direction of fan when taking out the power supply module. And draw the power supply forth.

3.2.3 Installing the Fan

DG-CS4550FF-28/IS Series switch has 5 fans in standard configuration.

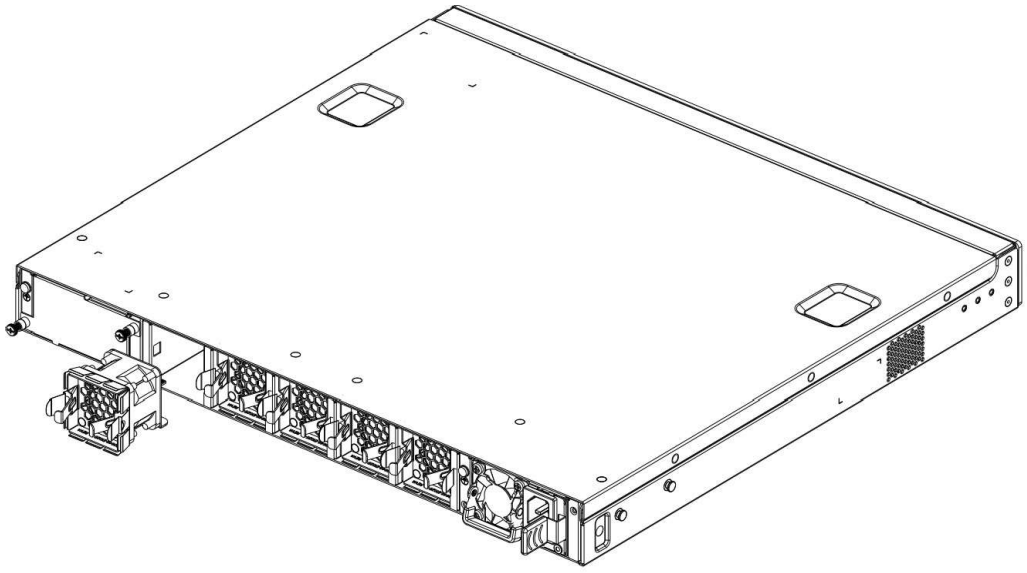

Figure 3-4 The figure of DG-CS4550FF-28/IS Series switch installing the fan

Please install the fan module according to the following approach:

1. The golden finger is inward and adown and aim at the fan rabbet of the back machine flatly to the end. You can hear the lock sound of “click”.
2. Pinch the sheet metal inward and draw the fan module forth when taking out it.

Caution!

The sheet metal edge of fan is thin, please watch your fingers when pinch, press, insert and pull it.

3.2.4 Connecting Console

DG-CS4550FF-28/IS Series provide a serial console port.

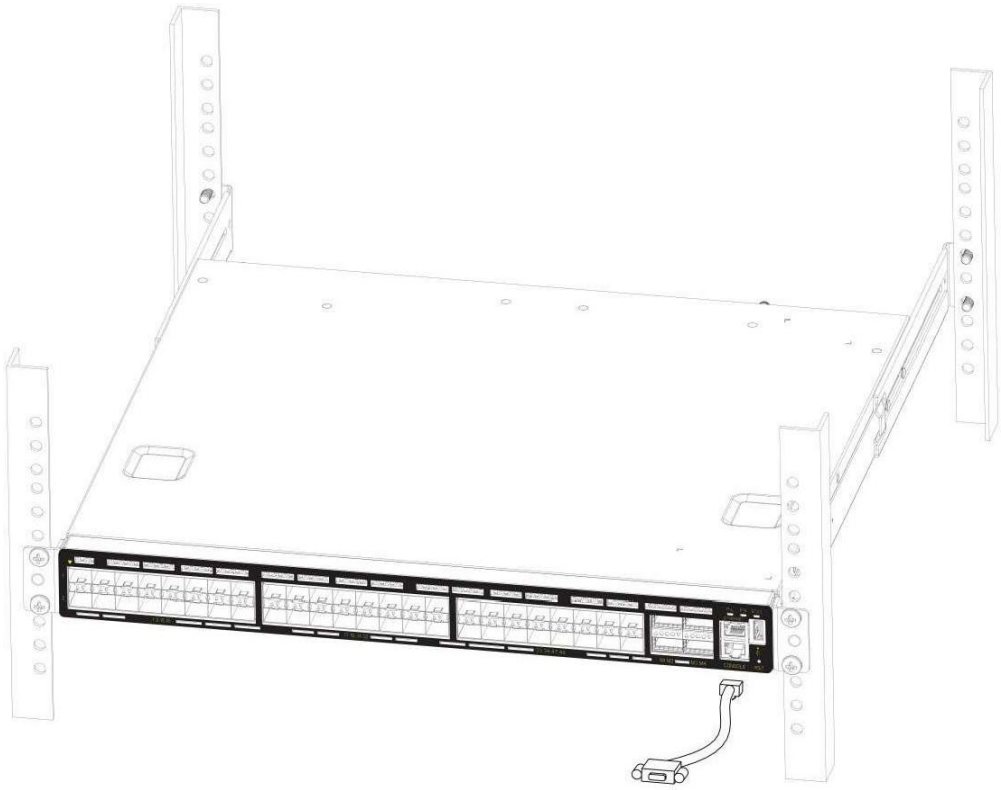

Figure 3-5 Connecting Console to DG-CS4550FF-28/IS

Series switchThe connection procedure is listed below:

1. Find the console cable provided in the accessory kit. Attach the console cable end to console port of the switch.
2. Connect the other side of the console cable to a character terminal (PC).
3. Power on the switch and the character terminal. Configure the switch through the character terminal.

3.2.5 SFP/SFP28/QSFP28 Transceiver Installation

DG-CS4554FF-28/ISand DG-CS4554FF-28/ISprovide 48 SFP28 transceiver slots and 6QSFP28 ports. DG-CS4532FF-28/IS provides 32 QSFP28 transceiver slots.

The procedure for installing the SFP/SFP28/QSFP28 transceiver is shown below:

Step 1: Put on a ESD wrist strap (or antistatic gloves)

Step 2: Insert the SFP/SFP28/QSFP28 transceiver to the guide rail inside the SFP/SFP28/QSFP28 port. Do not put the SFP/SFP28/QSFP28 transceiver up-side-down.

Step 3: Push the SFP/SFP28/QSFP28 transceiver along the guide rail gently until you feel the transceiver snap into place at the bottom of the SFP/SFP28/QSFP28 port.

Note: the SFP/SFP28/QSFP28 transceiver is hot swappable.

Caution!

Do not stare directly at the 2 fiber bore in the SFP transceiver when the switch is in operation, otherwise the laser may hurt your eyes.

3.2.6 Copper Cable/Fiber Cable Connection

Copper cables should be connected as below:

Step 1: Insert one end of the Ethernet cable to the RJ-45 Ethernet port in the switch copper port;

Step 2: Insert the other end of the Ethernet cable to the RJ-45 Ethernet port of other device;

Step 3: Check all status indicators for the corresponding ports; a lighted LED indicates that the link has been established, otherwise the link is not ready and the cable should be examined.

Caution!

Please verify the sign above the port to ensure using the right port. Connecting to wrong ports might damage the switch.

Fiber cables should be connected as below:

Step 1: Remove the protective plug from the SFP/SFP28/QSFP28 fiber transceiver bore; Remove the protective cap from one end of the fiber cable. Keep the fiber end clean and neat.

Step 2: Attach one end of the fiber cable to the SFP/SFP28/QSFP28 transceiver, and attach the other end to the transceiver of the corresponding devices. Note: The SFP/SFP28/QSFP28 transceiver's TX port should be connected to the RX port of the corresponding device, and vice versa.

Step 3: Check the fiber port status indicator, a lighted LED indicates that the link has been established; otherwise the link is not ready and should be examined.

Caution!

Please verify the sign above the port to ensure using the other ports. Connecting to wrong ports might damage the transceiver or the other ports. When connecting other devices through a fiber cable to the switch, the output power of the fiber cable must not exceed the maximum received power of the corresponding modules. Otherwise, it will damage the fiber transceiver. Do not stare at the fiber bore when the switch is in operation. That may hurt your eyes.

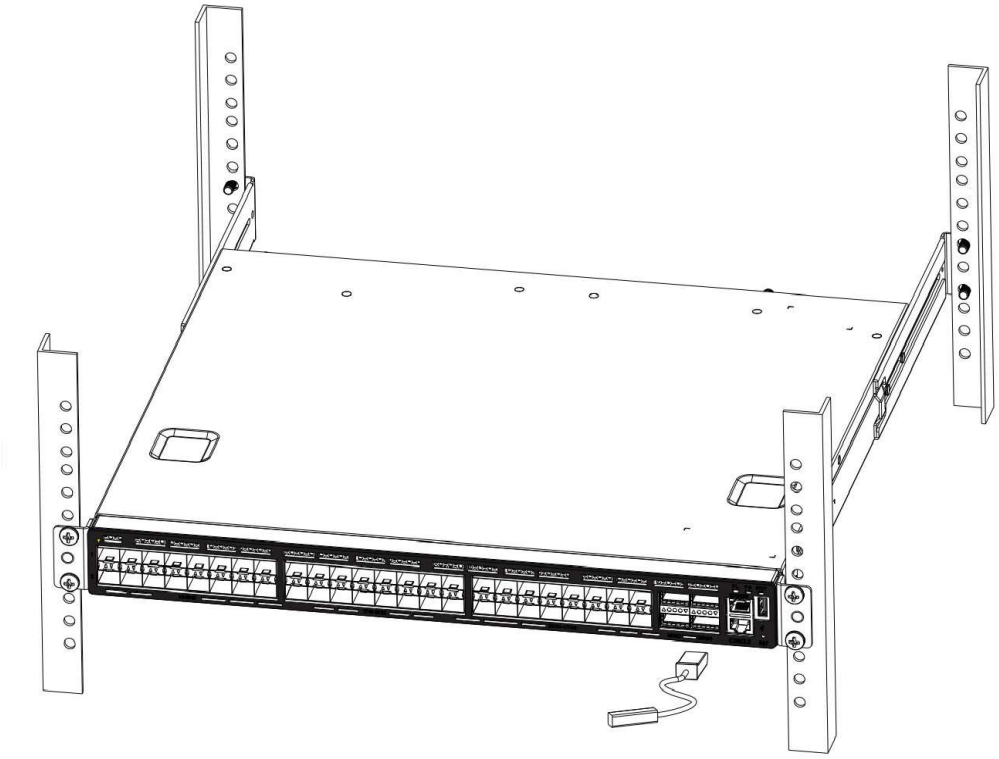

Figure 3-6 Connect the DAC cable to DG-CS4550FF-28/IS Series switch

The connection approach of DAC cable is below:

1. Connect the two side of DAC cable to SFP/SFP28/QSFP28 transceiver of DG-CS4550FF-28/IS Series switch.
2. Check out the indicator light state of the light port. If LINK light is bright, it means the link is connection. If LINK light puts out, it means the lines have trouble and please check out the line connection.

3.2.7 AC Power Supply Connection

DG-CS4550FF-28/IS Series uses 220VAC power supply by default. Please read the power inputspecification for the detailed information.

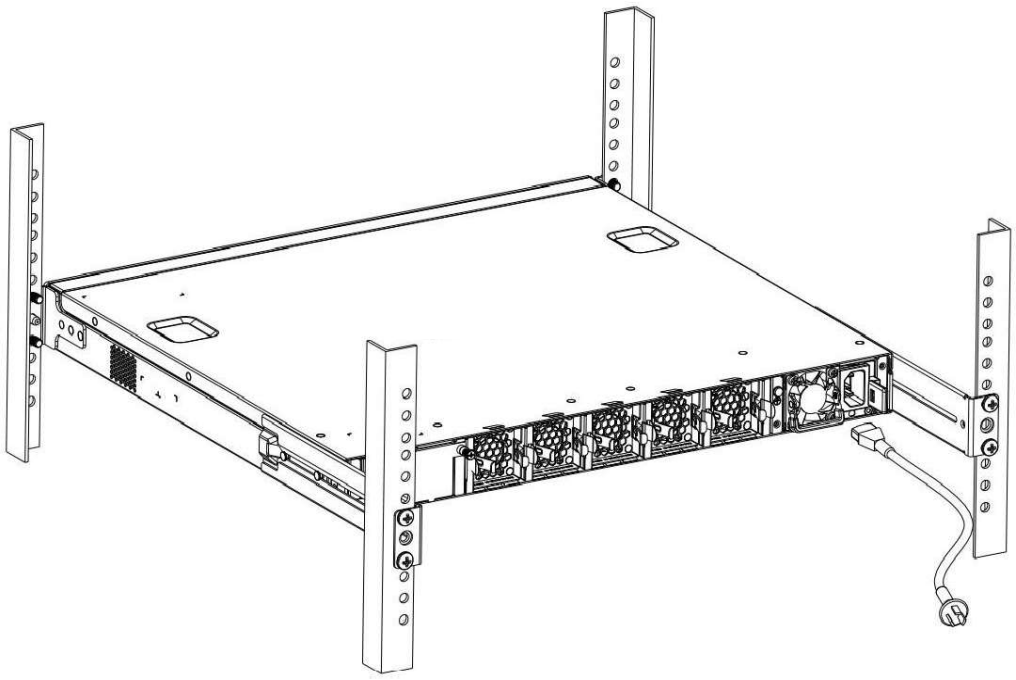

Figure 3-7 Connect the power supply cable to the DG-CS4550FF-28/IS

Series switchAC Power supply connection procedure is described as below:

1. Insert one end of the power cable provided in the accessory kit into power source socket, and the other end to the power socket (with overload and leakage protection).
2. Check the power status indicator in the front panel of the switch. The corresponding PWR indicator should light. DG-CS4550FF-28/IS Series is self-adjustable for the input voltage. As soon as the input voltage is in the range printed on the switch surface, the switch can operate correctly.
3. When the switch is powered on, it executes self-test procedure and startups.

Caution!

The input voltage must be within the required range, otherwise the switch can be damaged or malfunction. Do not open the switch shell without permission. It can cause physical injury.

3.2.8 Earthing Cable Connection

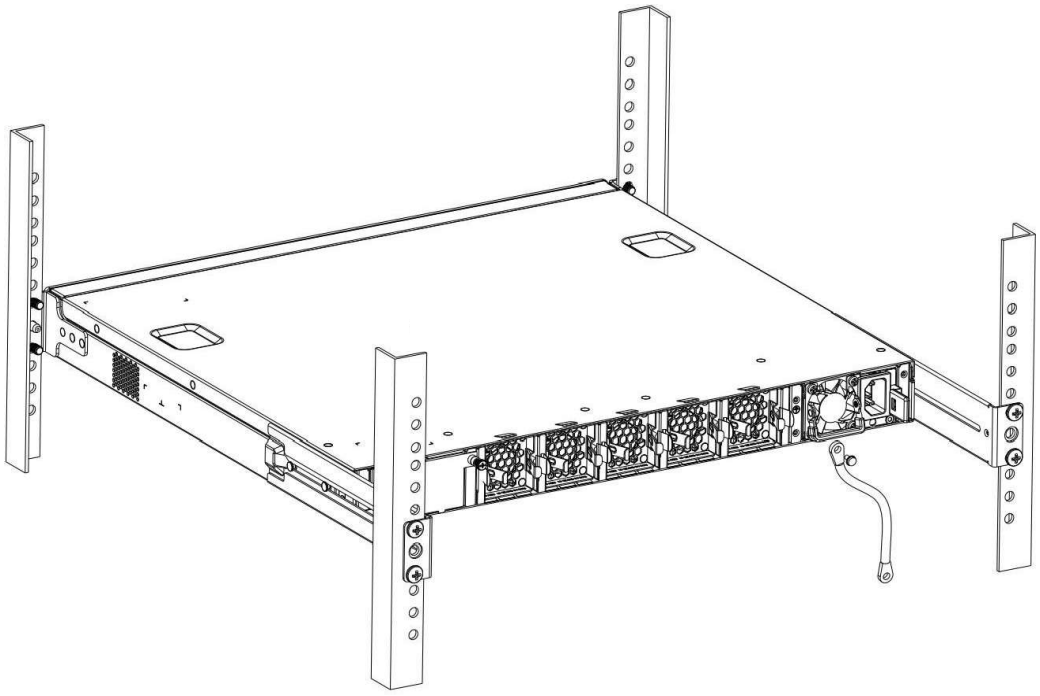

Figure 3-8 Connect the earthing cable to the DG-CS4550FF-28/IS Series switch

Please connect the earthing cable according to the following approach:

1. Screw out the fixed nut on the earthing pillar of the switch.
2. Cover one side of the earthing cable to the earthing pillar of the back panel.
3. Put and screw down the fixed nut.
4. Connect another side of the earthing cable to the earthing side.

3.2.9 Checking the Switch

- Whether the used power corresponds to the power of the sign.
- Whether the ground cable is connected.
- Whether the Console cable connect to power cable correctly.
- If there are cables at the outside, please ensure the cable is well connected with the lightning protection devices.