FS C21 Open Line System User Guide

**C21 Open Line System
User Guide**
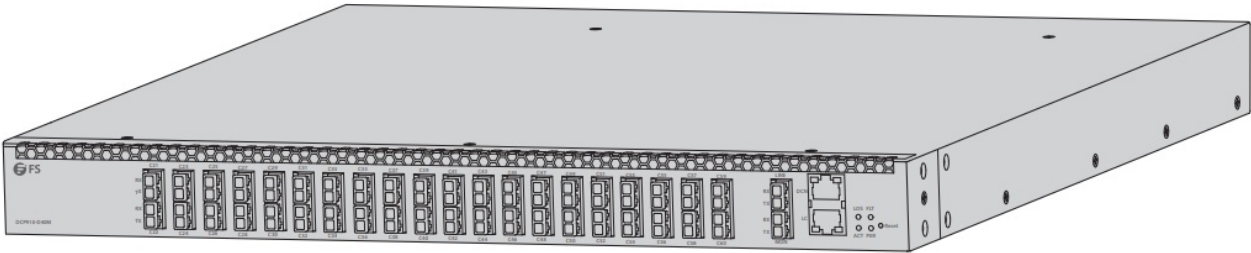
**OPEN LINE SYSTEM
V1.0
Quick Start Guide**

Contents

Introduction

40 Channels Open Line System is a complete, high-reliability Dynamic Connectivity Platform for long-distance, high bandwidth applications. It is used in point-to-point 100G applications with PAM4 modules, providing all of the optical grooming necessary for the transmission of up to 40 channels of multiple data rates while maintaining the simplicity of automated zero-touch provisioning.
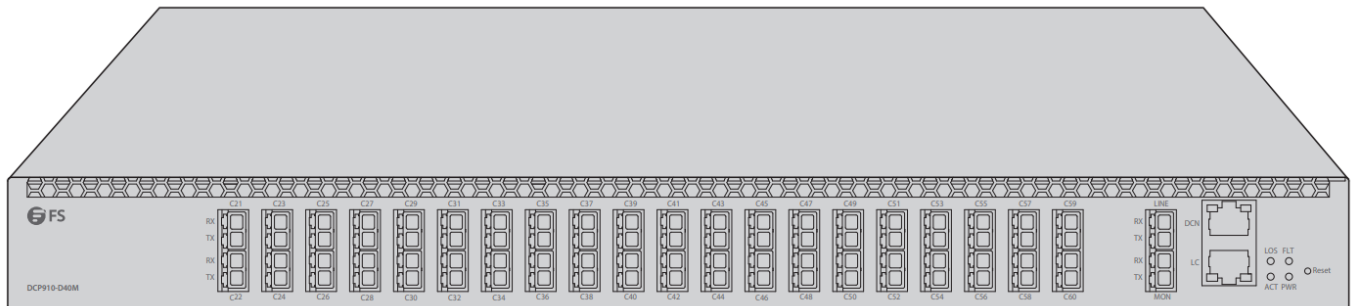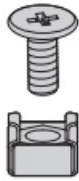

Accessories
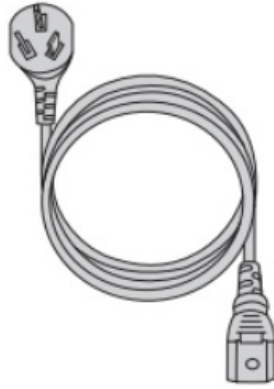
Power Cord x2
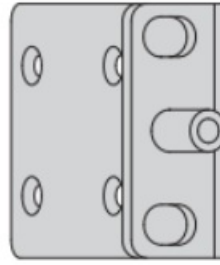
Mounting Bracket x2

M6 Screws&Nuts x4
（Not Included）

M3 Screw x8
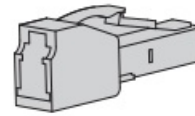
Optical Attenuators x50

Hardware Overview

Front Panel Ports

C21-C60 Channel Port

Line Port   MGMT

MON   CONSOLE
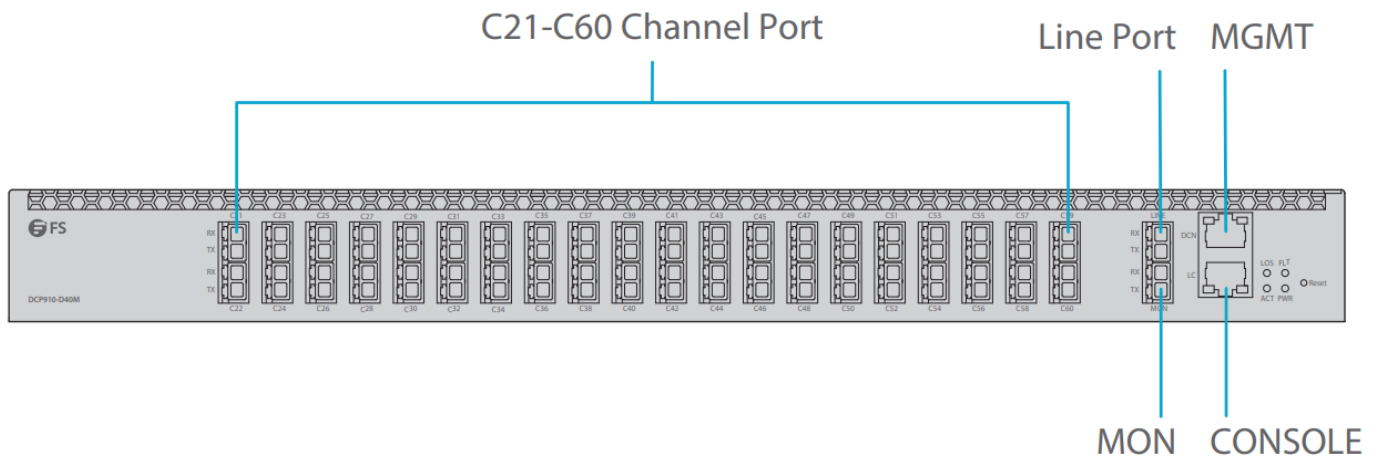
Port	Port Type	Description
C21-C60 Channel Port	C21-C60	ITU grid DWDM trac
Line Port	LC/UPC	Dense WDM port
MON	LC/UPC	Optical performance monitoring
MGMT	RJ45 ETH	Internet communication and management
CONSOLE	RJ45 ETH	Debugging & upgrading port

Front Panel LED
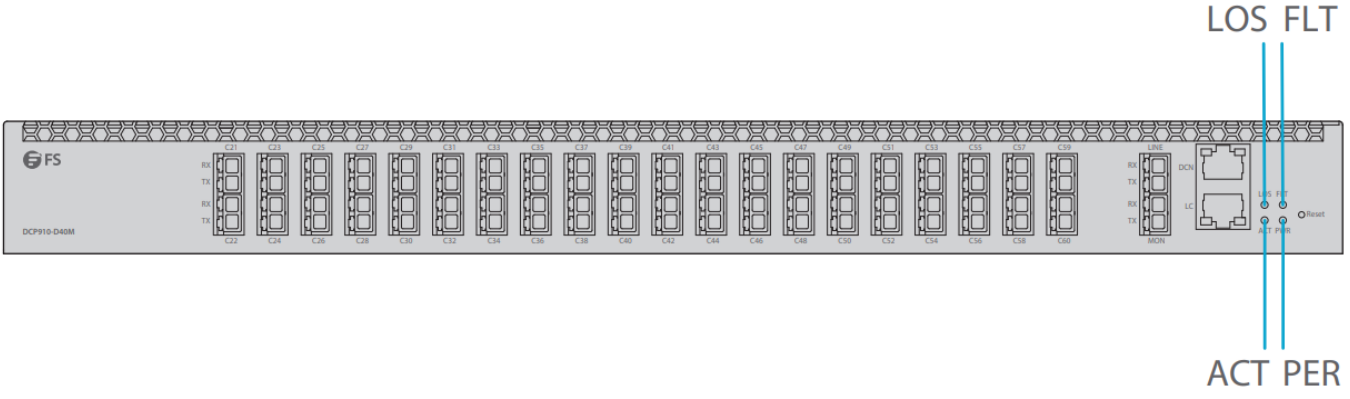
LEDs	Status	Description
LOS	Green Light	The optical signal is transmitted normally.
	Red Light	There is a critica alarm of the device.
FLT	Red Light	The optical signal is transmitted abnormally.
	OFF	There is no alarm of the device.
ACT	Green Light	The system works normally.
	OFF	The system is powered on.
PWR	Green Light	The system works abnormally.
	OFF	The system is powered off.

**Back Panel**
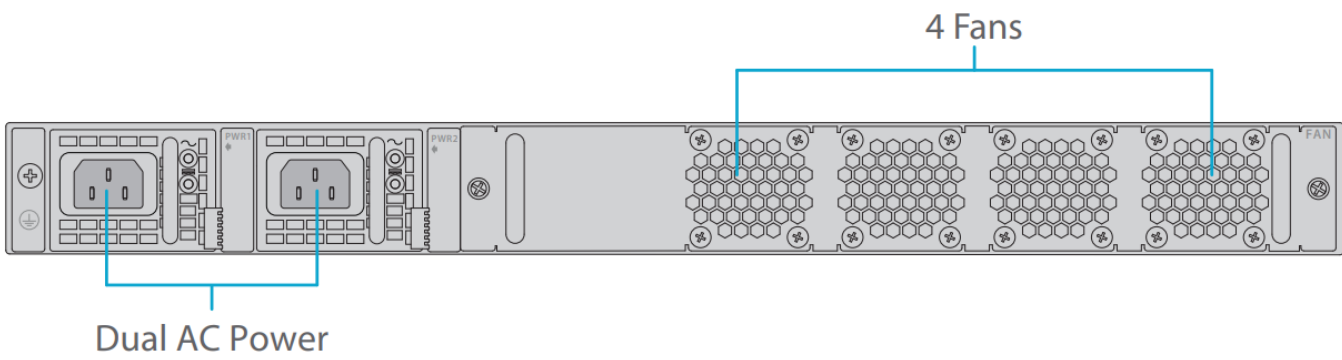
Site Environment

Keep the equipments indoors. If it is in rainy season or in humid environment, dehumidification measures must be taken.
Ensure there is no water on the storage floor and no leakage to the packing box of the equipment.
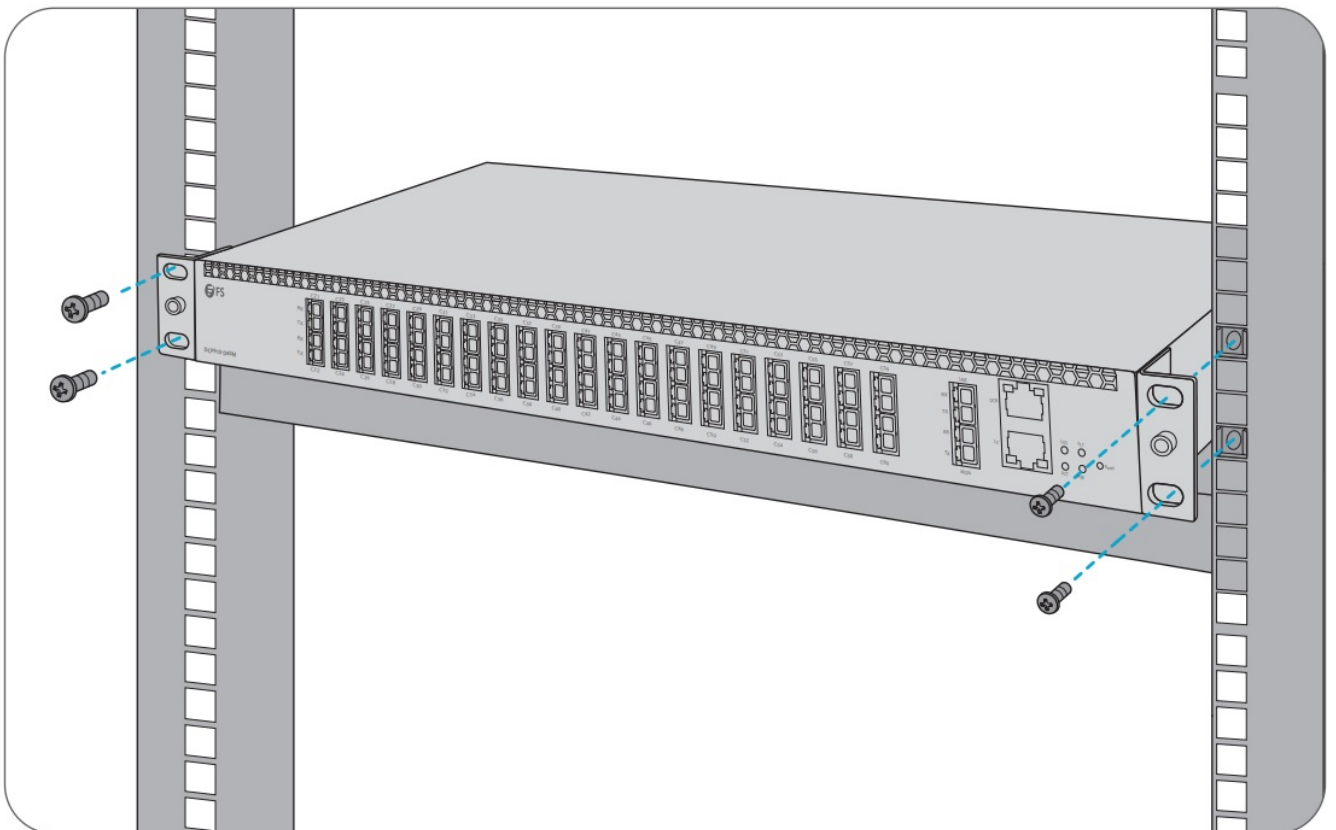Avoid automatic fire fighting facilities, heating system and other places where leakage may occur.

Installing

Installing Mounting Brackets
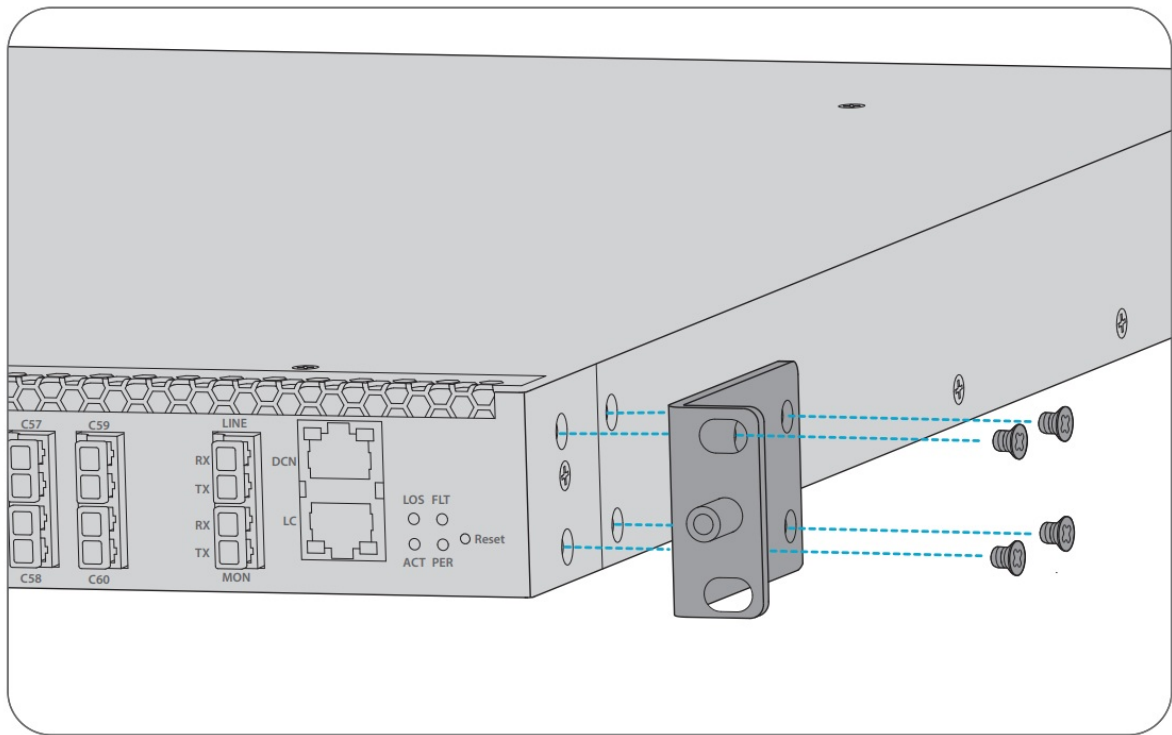
1. Secure the mounting brackets to the two sides of the open line system with 8x M3 screws.

2. Put the open line system on the shelf in the cabinet.
3. Install and tighten the panel with 4 sets of M6 Screws&Nuts.

Grounding the Open Line System
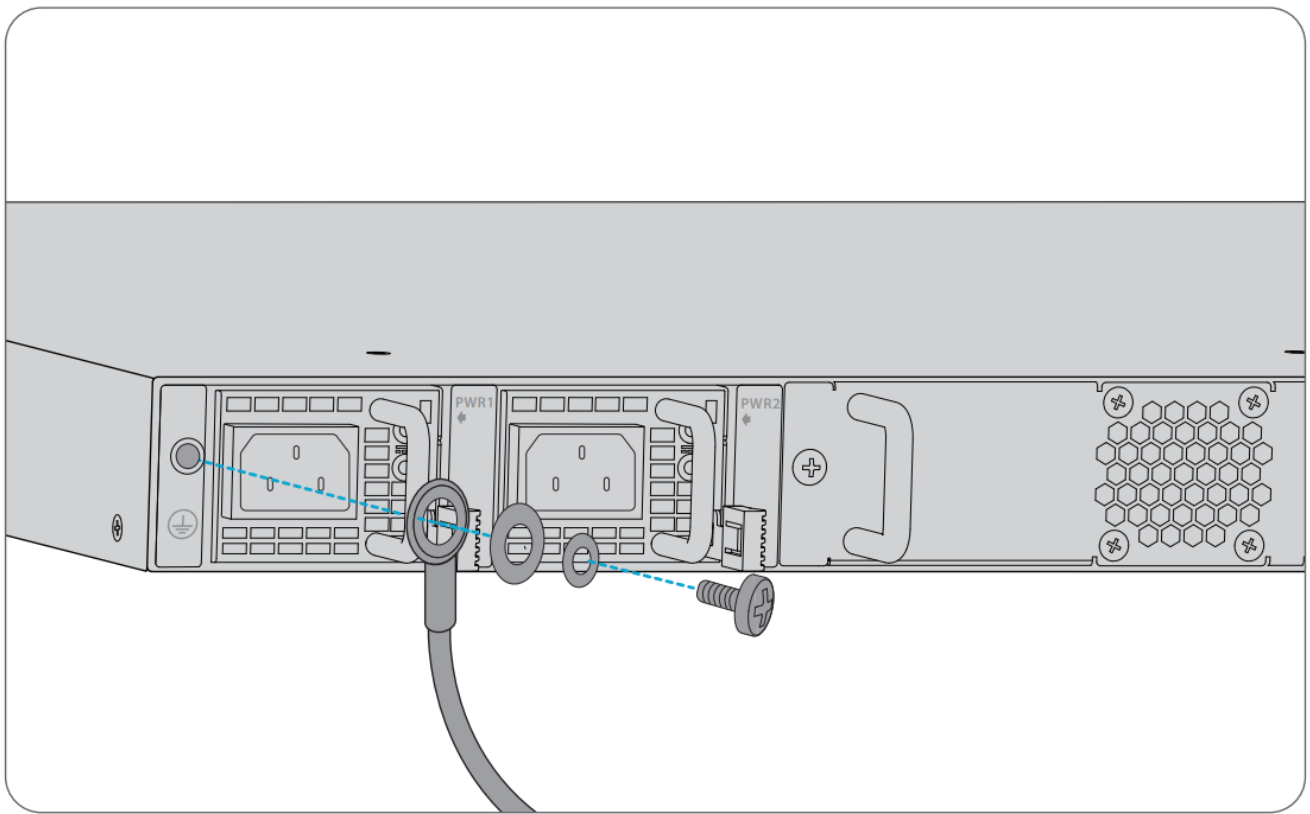
1. Secure the grounding lug to the grounding point on the front panel with washers and screws.
2. Connect the other end of the cable to a proper earth ground.

Connecting the Power Cord
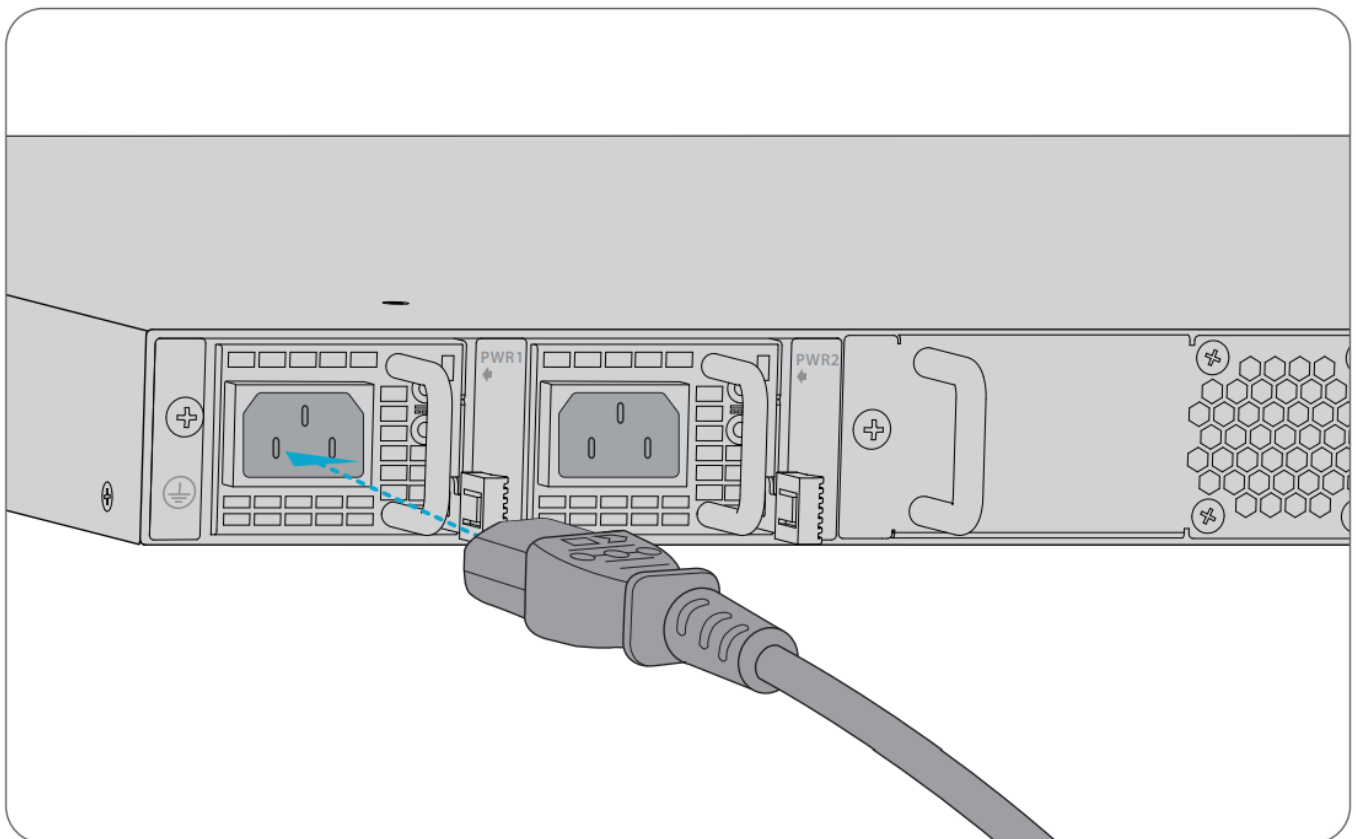
1. Plug the AC power cord into the power port on the back panel.
2. Connect the other end of the power cord to an AC power source.

⚠️ **WARNING:** Do not install power cables while the power is on.

Installing Fiber Cables

Connecting to the Console/MGMT Ports

1. Connect one end of the console cable/Ethernet cable to the MGMT port.
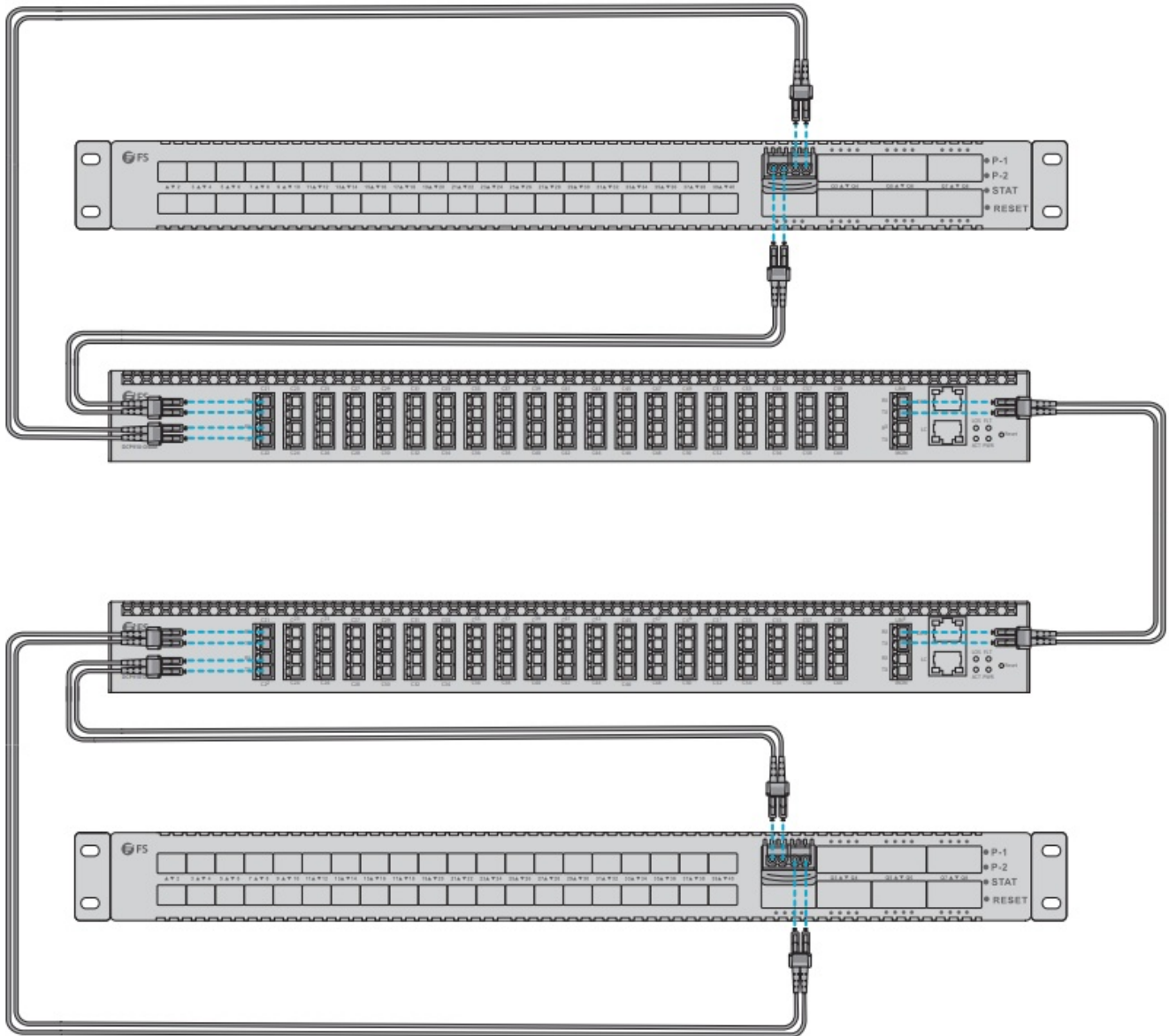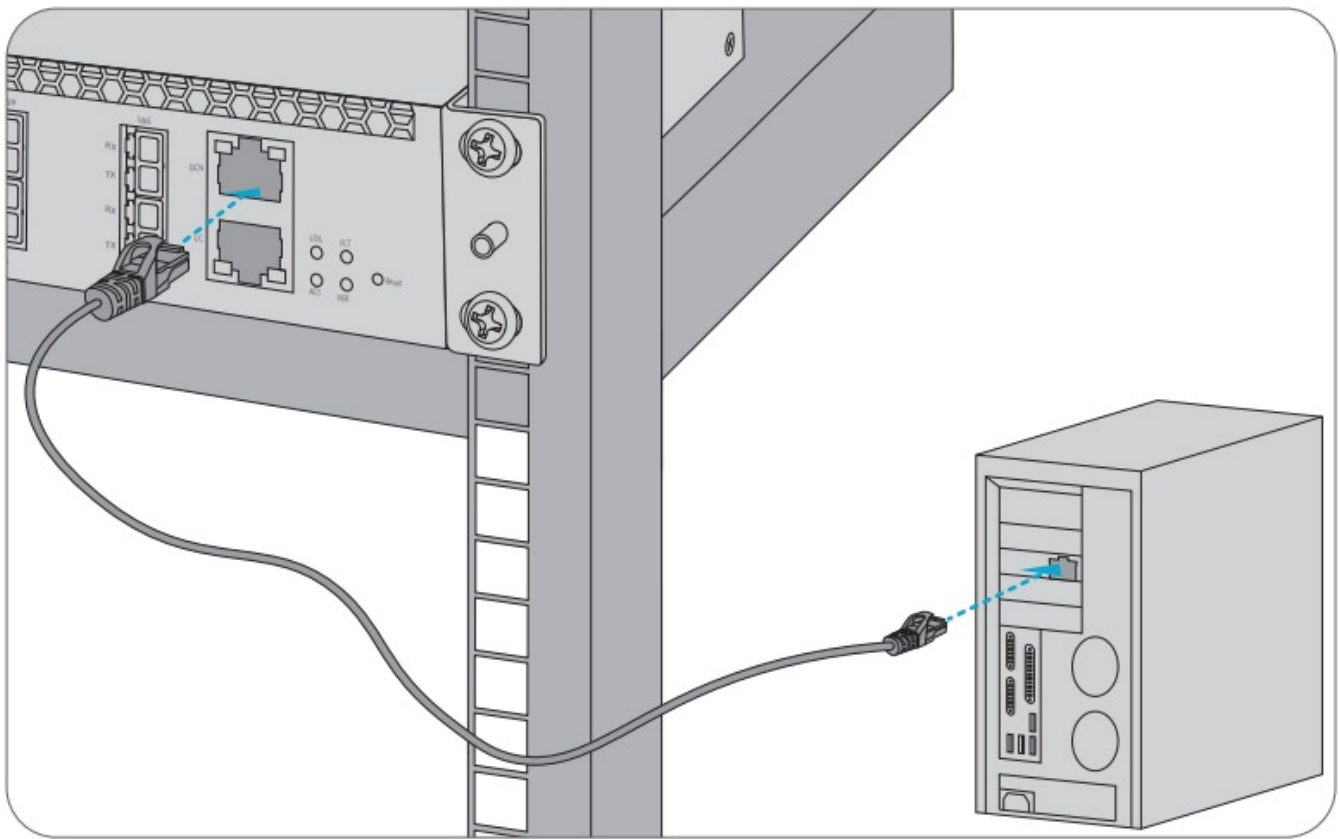
2. Connect the other end of the console cable/Ethernet cable to a computer.

Configuring the Open Line System

Step 1: Connect the open line system to a computer through MGMT port with Ethernet cables.
Step 2: Enter the built-in IP address(192.168.1.100) on the web page.
Step 3: Log in to the netmanager software DCP(Account: superuser; Password: Hsl2018$).

FS

User Name

User Password

Login

WebManager Version: 1.00.001   Copyright©2022 FS Corporation.All rights resered.

Step 4: Find "Configure" in the MENU on the left.
Step 5: Click "Link Conf" then parameters will be automatically set.

MENU	EDFA Setting		
Status	Pre-Amp EDFA SW:	On	Booster Amp EDFA SW:	On
Monitor	Pre-Amp EDFA Gain: (dB)	15.00	Pre-Amp EDFA Tilt: (dB)	0.00
Configure				
System	Optical Parameter		
Upgrade	TDC	-10.00	Fiber Type	G652_30km-80km
Help				

Link Conf   Apply

WebManager Version: 1.00.001   Copyright©2022 FS Corporation.All rights resered.

Troubleshooting

Failed to Connect to the Switch Remotely

1. Test network connectivity through ping.
2. If the network is reachable, try restarting the switch.
3. Check if the corresponding service is enabled.

The Port is not Working, and the LED Indicator is Off

1. Ensure the switch ports are in the open state.
2. Check if the switch can read the DDM information.
3. Check if the port speed setting is correct.
4. Try looping the switch cable.

RJ45 port is not in connectivity or it is erroneous in receiving/ transmitting frames

1. Replace the twisted pair cable.
2. Check that if the port configuration has the common working mode with the connected switch.

Online Resources

Download **https://www.fs.com/products_support.html**
Help Center **https://www.fs.com/service/fs_support.html**
Contact Us **https://www.fs.com/contact_us.html**

Product Warranty

Warranty: This product enjoys 2 years limited warranty against defect in materials or workmanship. For more details about warranty, please check at:

Return: If you want to return item(s), information on how to return can be found at:

Compliance Information

FCC

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and

2. this device must accept any interference received, including interference that may cause undesired operation.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Responsible party (only for FCC matter)

FS.COM Inc.

380 Centerpoint Blvd, New Castle, DE 19720, United States **https://www.fs.com**

FS.COM GmbH hereby declares that this device is in compliance with the Directive 2014/30/EU and 2014/35/EU.

A copy of the EU Declaration of Conformity is available at **www.fs.com/company/quality_control.html**

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Q.C. PASSED

Documents / Resources

	FS C21 Open Line System [pdf] User Guide C21 Open Line System, C21, Open Line System, Line System

References

- ⑤ [FS.com - Data Center, Enterprise, Telecom](#)
- ⑤ [Quality Certification - FS.com](#)
- ⑤ [Ein weltweit führender Anbieter von Hochgeschwindigkeits-Konnektivitätsgeräten und -lösungen. - FS.com Deutschland](#)
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