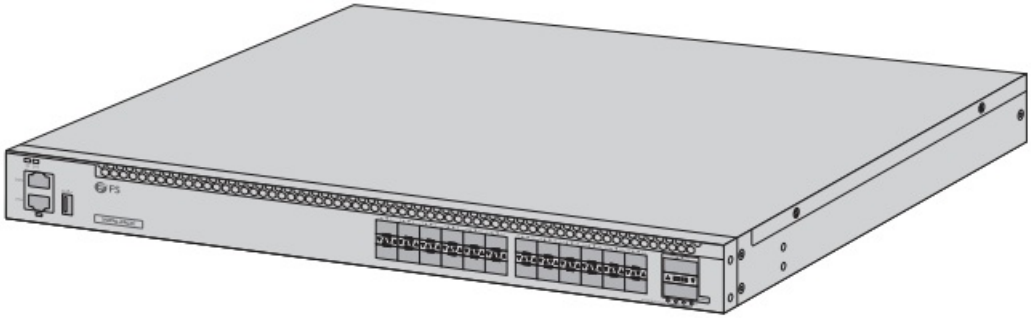
FS T5850-24S2C Network Packet Broker User Guide



Contents

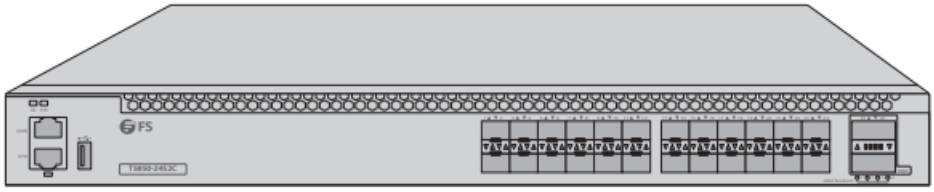
T5850-24S2C

NETWORK PACKET BROKER

Quick Start Guide V1.0

Introduction

Thank you for choosing T5850-24S2C Network Packet Broker. This guide is designed to familiarize you with the layout of the Network Packet Broker and describes how to deploy the Network Packet Broker in your network.

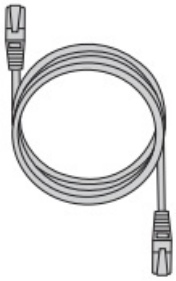


T5850-24S2C

Accessories

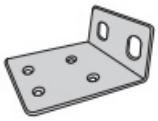
Power cord x2

Console cable x1



Network cable x1

Grounding cable x1



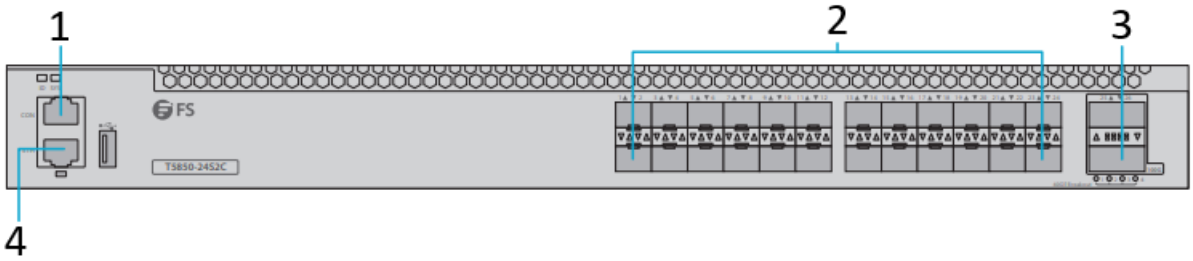
Mounting bracket x2

M4 screw x8

Rubber feet x4

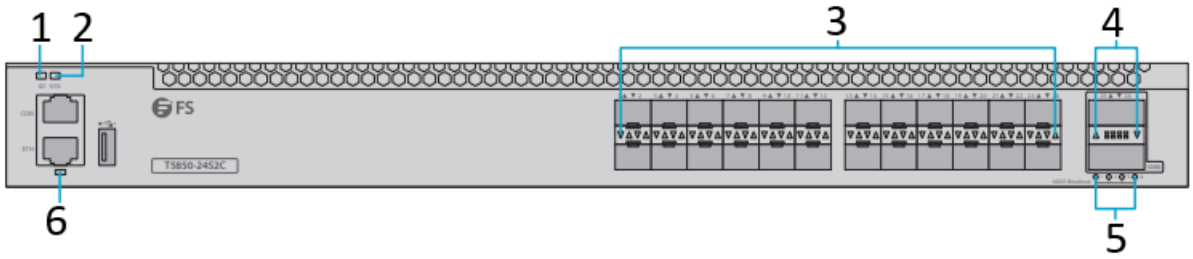
Hardware Overview

Front Panel Ports



No.	Ports	Description
1	**Console**	An RJ45 console port for serial management
2	**SFP+**	SFP+ ports for 10G transceivers
3	**QSFP28**	QSFP28 ports for 40/100 G connection
4	**ETH**	An Ethernet management port

Front Panel LEDs

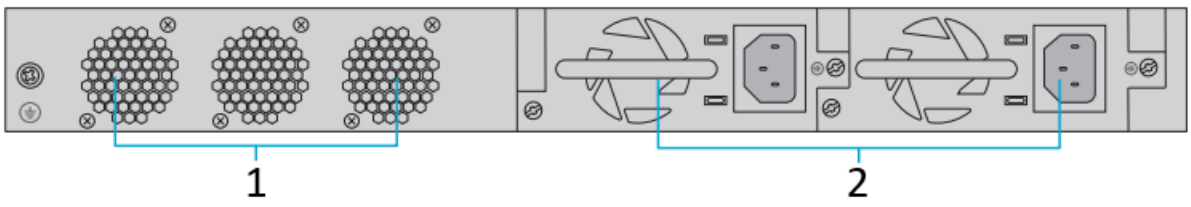


1. ID
2. SYS
3. SFP+
4. QSFP28
5. 40G Breakout LED
6. ETH

LEDs	Status	Description
SYS	Green	On: The system is normal running.
	Amber	On: The system occurs alarm or error.
		Off: No power or system is not run or abnormality.
Location	Blue	On: ID indication function enable.
		Off: ID indication function disable.
Main Power	Green	On: Power supply ok.
	Amber	On: Power supply is abnormality.
		Off: Power supply is absent or single power supply abnormality.

Backup Power	Green	On: Power supply ok.
	Amber	On: Power supply is abnormality. Power supply is absent or single power supply abnormality.
		Off: Power supply is absent or single power supply abnormality.
MGMT	Green	On: Port link.
		Blinking: Port is receiving or transmitting packets.
		Off: Port does not link.
Base-T	Green	On: 1G port link.
		Blinking: 1G packets receiving or transmitting.
	Amber	On: 10/100M port link.
		Blinking: 10/100M packets receiving or transmitting.
		Off: Port does not link.
SFP	Green	On: 1G port link.
		Blinking: 1G packets receiving or transmitting.
	Amber	On: 10/100M port link.
		Blinking: 10/100M packets receiving or transmitting.
		Off: Port does not link.
SFP+	Green	On: 40G port link.
		Blinking: 40G packets receiving or transmitting.
	Amber	On: 10G/1G port link.
		Blinking: 10G/1G packets receiving or transmitting.
		Off: Port does not link.
Breakout	Loop Blinking	One or more 100G/40G ports are breakout.
	Off	None of the 100G/40G port is breakout.

Back Panel



1. 3 Redundant Fans

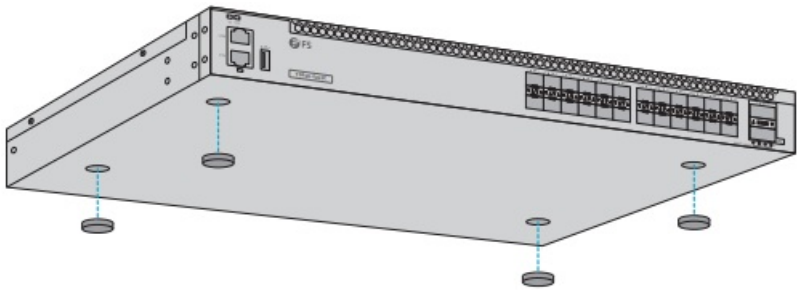
2. Hot-swappable Power Supplies

Installation Requirements

- The operating temperature is maintained at 0°C-45°C, the storage temperature is maintained at -40°C-85°C, the humidity is maintained at 10%-95%.
- Power source should be removed before cleaning Network Packet Brokers. Do not use wet rags to wipe Network Packet Brokers and clean it with liquid.
- Do not place Network Packet Brokers near water or in a wet environment and prevent water or moisture from entering Network Packet Broker chassis.
- Do not place Network Packet Brokers on an unstable case or table, since the dropping would cause serious harm to Network Packet Brokers.
- Maintain good indoor ventilation and clear air holes of Network Packet Brokers.
- Network Packet Brokers shall work normally under correct voltage, so make sure the operating voltage agrees with the voltage marked on Network Packet Brokers.
- To reduce the risk of electric shock, do not remove its enclosure when a Network Packet Broker is working, and don’t do so at will even if it is not powered.
- Anti-static gloves must be worn when replacing interface board to prevent static electricity from damaging veneer.
- During equipment transport and installation, prevent the equipment from colliding with objects like doors, walls, or shelves.
- Do not touch unpainted metal surfaces of equipment components with wet or contaminated gloves.
- Do not place other objects on the chassis.

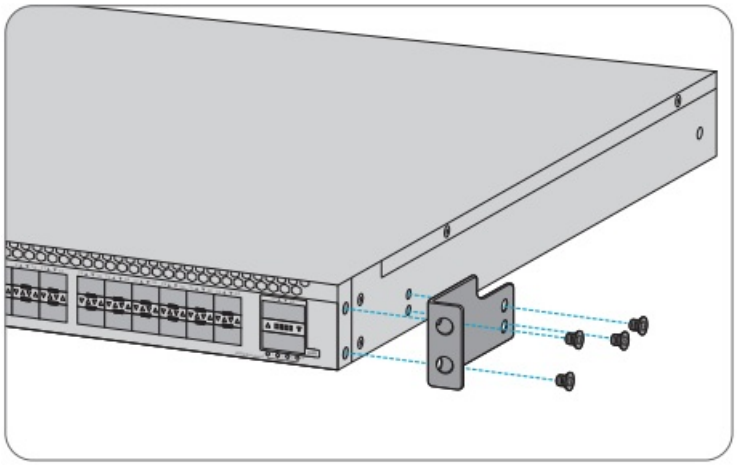
Installation

Desk Mounting



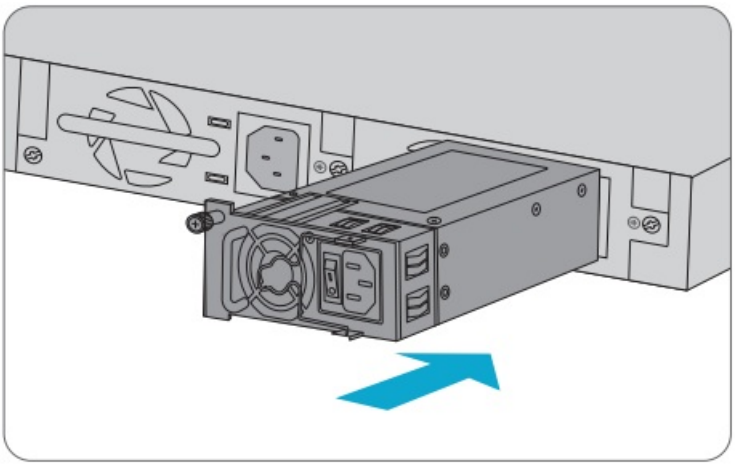
1. Attach four rubbers pads to the bottom.
2. Place the chassis on a desk.

Rack Mounting



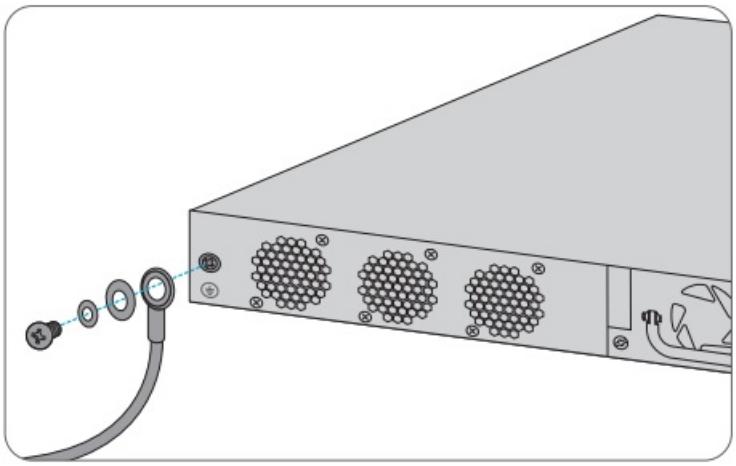
1. Fix the tray to a proper position of rack horizontally.
2. Take out screw (complete package with front hangers), and install one end of the Front Mounting Brackets on Network Packet Broker.

Installing the Power Supply Module



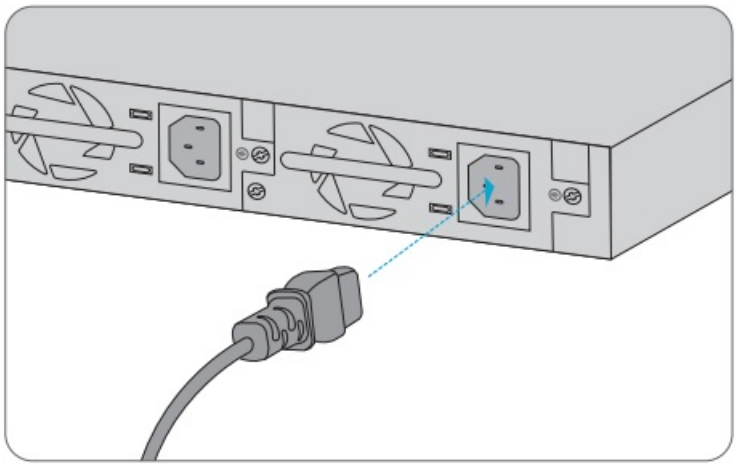
1. Hold the handle of the Power Supply Unit with one hand and press on the top of the Network Packet Broker with another hand.
2. Pull out the power module by smoothly sliding along the power slot until the plug of power module is completely separated from the socket inside chassis.

Grounding the Network Packet Broker



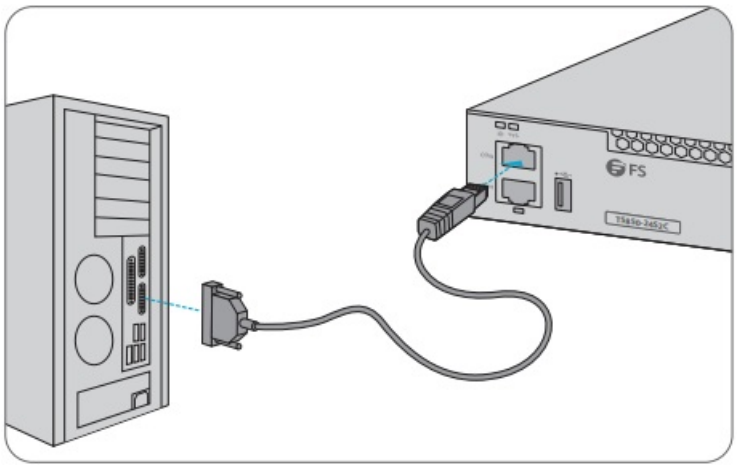
1. Connect one end of the grounding cable to a proper earth ground, such as the rack in which the Network Packet Broker is mounted.
2. Secure the grounding lug to the grounding point on the Network Packet Broker back panel with the washers and screws.

Connecting the Power



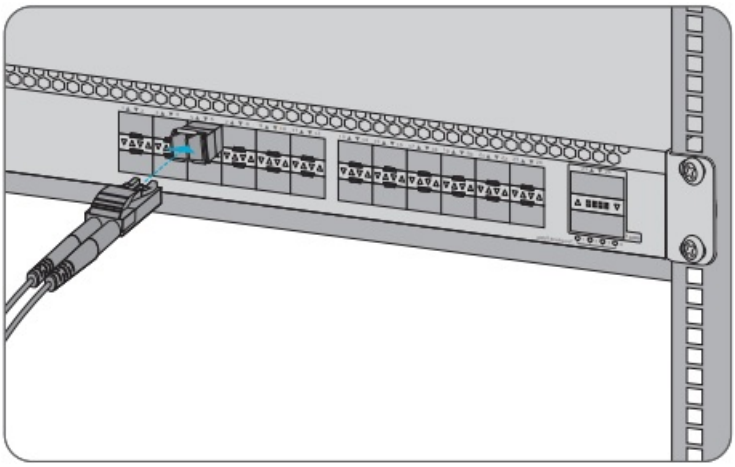
1. Plug the AC power cord into the power port on the back of the Network Packet Broker.
2. Connect the other end of the power cord to an AC power source.

Connecting the Console Port



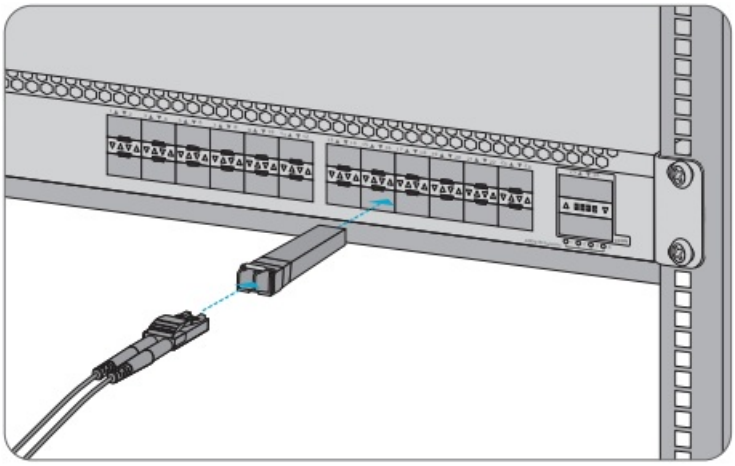
1. Insert the RJ45 connector into the RJ45 console port on the front of the Network Packet Broker.
2. Connect the DB9 female connector of the console cable to the serial port on the computer.

Connecting the RJ45 Port



1. Connect an Ethernet cable to the RJ45 port of IP cameras, IP phones, Access Points (AP), or other network devices.
2. Connect the other end of the Ethernet cable to the RJ45 port of the Network Packet Broker.

Connecting the SFP/SFP+ Ports

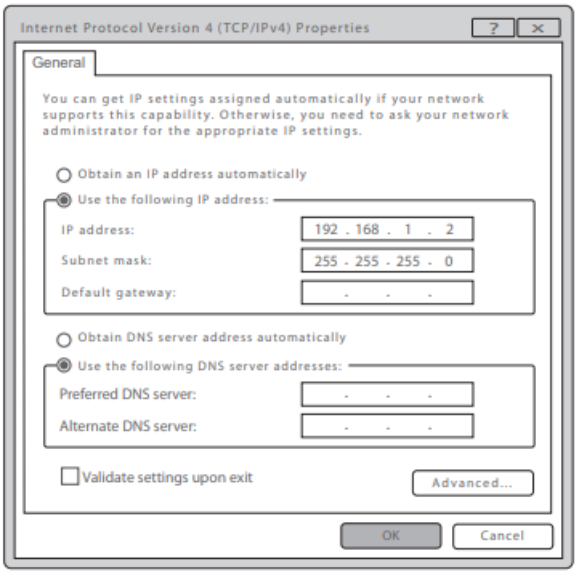


1. Plug the compatible SFP/SFP+ transceiver into the SFP/SFP+ port.
2. Connect a fiber optic cable to the fiber transceiver. Then connect the other end of the cable to another fiber device.

Configuring the Network Packet Broker

Configuring the Network Packet Broker Using the Web-based Interface

Step 1: Connect the computer to any Ethernet port of the Network Packet Broker using the network cable.
Step 2: Set the IP address of the computer to 192.168.1.x(“X” is any number from 2 to 254). Set the subnet mask of the computer to 255.255.255.0

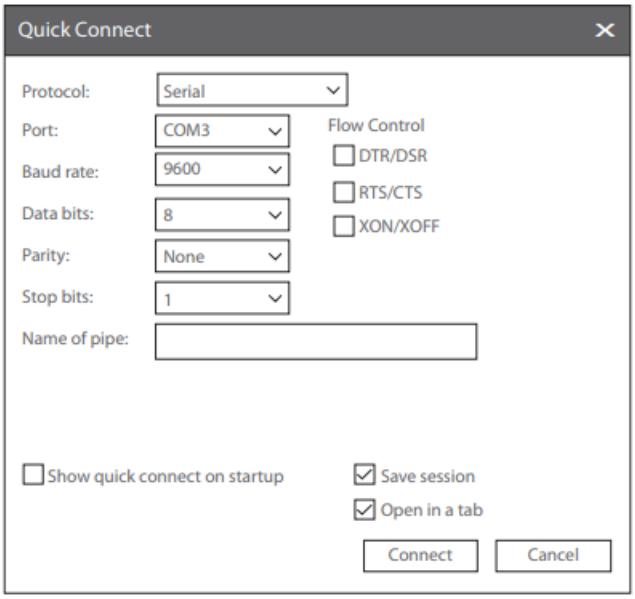


Step 3: Open a browser, type http://192.168.1.1, and enter the default username and password, admin/admin.

Step 4: Click Login to display the web-based configuration page. 9

Configuring the Network Packet Broker using the Console Port

Step 1: Connect a computer to the Network Packet Broker's console port using the console cable.
Step 2: Start the terminal simulation software such as HyperTerminal on the computer.
Step 3: Set the parameter of the HyperTerminal: 115200 bits per second, 8 data bits, no parity, 1 stop bit and no flow control.



Step 4: After setting the parameters, click Connect to enter.

Troubleshooting

Loading Failure Processing

After loading fails, the system will keep running in the original version. At this time, users should re-check if physical port connections are good firstly. If some ports are not connected, then re-connect them to ensure that physical connections are correct and begin re-loading. If physical connections are correct, then check the loading process information displayed on the super terminal to verify if there are input errors. If there are input errors, correct them and re-load. For example, when using TFTP protocol, we enter incorrect IP addresses of Server and Network Packet Broker, name of loading software, do not specify the correct working path of correct TFTP server and so on; if physical connections are good, and there are no input errors in the loading process, but the loading fails finally, please contact agents for help.

User Password Lost

If system password is lost or forgotten, the following method can be used to reset password:
– Enter Uboot operation mode; see Chapter 5 for how to enter.
– Input boot_flash_nopass command to start system in Uboot mode.
After using boot_flash_nopass command, system will clear up the startup-config files; before starting this operation, the startup-config files will be stored in flash:/startup-config.conf.old file.

Power System Troubleshooting

Network Packet Broker can judge if its power system is faulty according to the PWR indicator on the front panel: when power system works normally, the PWR indicator shall always keep lighting; when the PWR indicator is off, please check if:
– The power line of Network Packet Broker is connected correctly.
– EPS of Network Packet Broker matches the power required by Network Packet Broker.

Configuration System Troubleshooting

After the Network Packet Broker is powered on, if system is normal, the startup information will be displayed on the configuration terminal; If the configuration system is faulty, the configuration terminal may display no information or hashes.

No Information On the Terminal

After power-on, if no display information on configuration terminal appears, please check if:
1. The power is normal.
2.The cable of configuration port (Console) is properly connected.
If no problems have been found after the above checks, it is possible that configuration cable is faulty or the parameter setting of terminal (such as super terminal) are incorrect, please check accordingly.
3. Troubleshooting for the terminal displaying hashes:
If the configuration terminal displays hashes, it is probable that the parameter setting of terminals (such as super terminal) are incorrect Please confirm the parameter setting of terminals (such as super terminal): baud rate: 115200, data bit: 8, parity: no, stop bit: 1, flow control: NA, selecting terminal emulation: VT100.

Support and Other 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

FS ensures our customers that if there are any damage or faulty items due to our workmanship, we will offer a free return within 30 Days from the day you receive your goods. This excludes any custom made items or tailored solutions.

Warranty: T5850 Series Network Packet Brokeres enjoy 5 years limited warranty against defect in materials or workmanship. For more details about warranty, please check at https://www.fs.com/policies/warranty.html

Return: If you want to return item(s), information on how to return can be found at https://www.fs.com/policies/day_return_policy.html

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

CE

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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IC

CANICES-3(A)/NMB-3(A)

Q.C. PASSED

Documents / Resources

	FS T5850-24S2C Network Packet Broker [pdf] User Guide T5850-24S2C Network Packet Broker, T5850-24S2C, Network Packet Broker, Packet Broker

References

- FS.com - Data Center, Enterprise, Telecom
- Quality Certification - FS.com
- Ein weltweit führender Anbieter von Hochgeschwindigkeits-Konnektivitätsgeräten und -lösungen. - FS.com Deutschland
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