Forcepoint

Next Generation Firewall

1200 Series

Model N1202, Internet Security Device

Hardware Guide

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Introduction

Thank you for choosing a Forcepoint appliance.

Familiarize yourself with the appliance ports and indicators and learn how to install the appliance safely.

Find product documentation

In the Forcepoint Customer Hub, you can find information about a released product, including product documentation, technical articles, and more.

You can get additional information and support for your product in the Forcepoint Customer Hub at https://support.forcepoint.com. There, you can access product documentation, release notes, Knowledge Base articles, downloads, cases, and contact information.

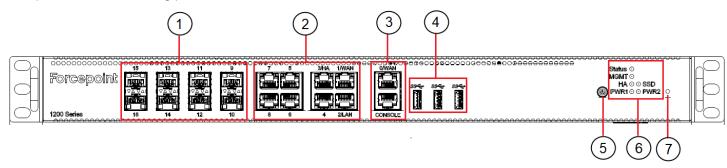
You might need to log on to access the Forcepoint Customer Hub. If you do not yet have credentials, create a customer account. See https://support.forcepoint.com/s/CreateAccount.

N1202 features

The figures and tables show the appliance components and features.

Front panel

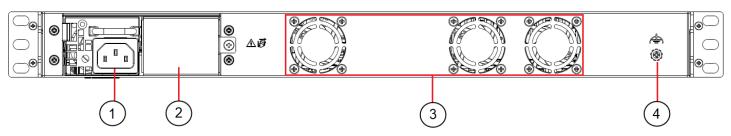
This panel has the following parts.



- 1 Fixed SFP+ ports 9-16 from top to bottom and right to left.
- 2 Fixed Ethernet 1Gbps RJ45 ports 1-8 from top to bottom and right to left.
- 3 Fixed Ethernet 2.5Gbps RJ45 port 0 and Console port
- 4 USB ports.
- 5 Power button with power indicator light.
- 6 Indicators for status, management (MGMT), high availability (HA), power (PWR1), power (PWR2), and disk activity (SSD).
- 7 Reset button.

Back panel

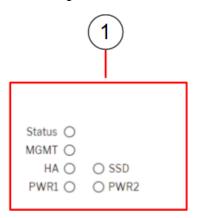
This panel has the following parts.



- 1 Power connector AC or DC IN (PWR1, for AC PSU 100 to 240 Volts and for DC PSU -36 to -72 Volts are supported) Provides power for the appliance.
- 2 Power connector AC or DC IN (PWR2, for AC PSU 100 to 240 Volts and for DC PSU -36 to -72 Volts are supported) Provides power for the appliance (optional).
- 3 Fan 1, 2 and 3.
- 4 Grounding point.

Indicator lights

Indicator lights show the status of the appliance and any fixed Ethernet ports.

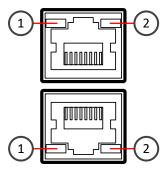


1 Status indicators

Indicator	Color	Description	
Status	Unlit	The initial configuration has not yet been generated.	
	Amber	Flashes while initial contact is being established. Steady amber when initial contact has been established, but the NGFW Engine is offline. Alternates with green when the NGFW Engine is in the standby state.	
	Green	Flashes when initial contact is established, but a policy has not been installed. Steady green when the NGFW Engine is online.	
MGMT	Unlit	The NGFW Engine has made initial contact but no policy is yet installed.	
	Green	Flashes when the NGFW Engine tries to make initial contact or when the NGFW Engine is reconnecting to the Log Server. Steady green when initial contact with the Management Server has been made, the management connection has been established, and a policy has been installed.	
НА	Unlit	The NGFW Engine does not have a clustering configuration.	
SSD	Green	Flashes on disk activity.	
PWR 1 and PWR 2	Unlit	No PSU is present at the respective power connector.	
	Green	A power source is connected to the respective PSU and power is supplied to the appliance.	
	Red	No power source is connected to the respective PSU, or the appliance is in standby powered state.	
		The standby powered state is also indicated by the red color in the power indicator light.	

Ethernet port indicators

Ethernet port indicators show the status and speed of the network ports.

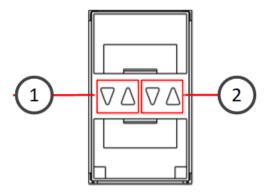


- 1 Activity/link indicator
- 2 Link speed indicator

Indicator	Color	Description
Activity/link indicator	Green	Steady when link is present. Flashes on activity.
	Unlit	No link.
Link speed indicator	Unlit	10 Mbps link.
	Amber	100 Mbps link.
	Green	1 Gbps or 2.5 Gbps link on port 0.

SFP port led indicators

SFP port led indicators show the status and speed of the network ports.



- 1 Activity/link indicator
- 2 Link speed indicator

Indicator	Color	Description
Activity/link indicator	Green	Link OK. Flashes on activity.
Link speed indicator	Yellow	1 GB link.

Indicator	Color	Description
	Green	10 GB link.

Precautions

The precautions provide safety guidance when working with Forcepoint appliances and electrical equipment.



CAUTION

Forcepoint appliances cannot be serviced by end users. Never open the appliance covers for any reason. Doing so can lead to serious injury and void the hardware warranty.

For additional safety information, see the Forcepoint Product Safety and Regulatory Compliance Guide.

General safety precautions

Read the safety information and follow these rules to ensure general safety whenever you are working with electronic equipment.

- Keep the area around the appliance clean and free of clutter.
- Use a regulating uninterrupted power supply (UPS) to keep your system operating during power failures and to protect the appliance from power surges and voltage spikes.
- If you need to turn off or unplug the appliance, always wait at least five seconds before turning on or plugging in the appliance again.

Operating precautions

Follow these precautions when operating the appliance.

- Do not open the power adapter casing. Only the manufacturer's qualified technician can access and service power adapters.
- For this specific appliance model, it is recommended to use the power supply that is shipped with the appliance or additional spare unit from Forecepoint.

Electrical safety precautions

Follow basic electrical safety precautions to protect yourself from harm and the appliance from damage.

- Know the locations of the power on/off button and the emergency turn-off switch, disconnection switch, or electrical outlet for the room. If an electrical accident occurs, you can quickly turn off power to the system.
- When working with high-voltage components, do not work alone.
- When working with electrical equipment that is turned on, use only one hand. This is to avoid making a complete circuit, which causes an electric shock. Use extreme caution when using metal tools, which can easily damage any electrical components or circuit boards the tools come into contact with.

- Do not use mats designed to decrease electrostatic discharge as protection from electric shock. Instead, use rubber mats that have been designed as electrical insulators.
- If the power supply cable includes a grounding plug, the plug must be plugged into a grounded electrical outlet.
- Use only the power cable or cables supplied with the appliance.



Standby power is supplied to the appliance even when the appliance is turned off.

AC power supply safety precautions

The appliance power inlet is the disconnect device on the appliance.

Install the appliance

There are several tasks that must be completed before the appliance is installed.

These tasks and the installation of the appliance might be done by the same person or by different persons:

- The Security Management Center (SMC) administrator is responsible for the tasks that are needed before the appliance is installed.
- The on-site installer is responsible for installing the appliance.

For more information, see the Forcepoint Next Generation Firewall Installation Guide.

To prepare for the appliance installation, the SMC administrator must do the following:

If the SMC has not yet been installed, install the SMC.



Important

Do not install the SMC on the NGFW appliance.

The SMC can manage many NGFW appliances.

- 2) In the Management Client component of the SMC, create and configure the NGFW Engine element that represents the appliance.
- 3) In the Management Client component of the SMC, save the initial configuration. The SMC administrator must either:
 - Upload the initial configuration to the Installation Server for plug-and-play configuration of the appliance.



Note

There are additional requirements for plug-and play configuration. See Knowledge Base article 9662.

Give the on-site installer a USB drive that contains an initial configuration file for each appliance.

The on-site installer must do the following:

Inspect the appliance, delivery box, and all components included in the shipment.



Important

Do not use damaged appliances or components.

- Connect all necessary power, network cables and other components, and then press the power button to turn on the appliance.
 - If the plug-and-play configuration method is not used, the on-site installer must insert the USB drive that contains the initial configuration files to configure the NGFW Engine software to an USB port before the appliance is turned on.
 - By default, only one power supply is shipped with the appliance. However, an additional power supply can be ordered and connected for redundancy.
 - Power supply monitoring is automatically enabled when the appliance is powered on using two power adapters. When power supply monitoring is enabled and only one power supply is present, a warning is provided in SMC engine info status pane.
- 3) When you have finished installing the appliance, inform the SMC administrator so that the administrator can check the status of the appliance in the Management Client.

Connect the cables

Connect the network and power cables.

Use at least CAT5e-rated cables for gigabit networks.

Network interfaces at both ends of each cable must have identical speed and duplex settings. These settings include the automatic negotiation setting. If one end of the cable uses autonegotiation, the other end must also use autonegotiation. Gigabit standards require interfaces to use autonegotiation. Fixed Forced settings are not allowed at gigabit speeds.

Connect the SFP+ transceivers

You must install appropriate SFP+ or SFP transceivers into the 8 to 11 interfaces before connecting them to 10Gbps or 1Gbps networks. For supported list of transceivers, see Knowledge Base article 37231.

To install transceiver:

Steps

- Attach the ESD wrist strap to your wrist and connect the attached grounding wire to the appliance grounding point.
- 2) Hold the sides of the transceiver and slide it into the port socket until clicks into place.
- 3) Disconnect the ESD grounding wire from the appliance.
- Plug the appropriate cables into the transceiver and check the connection using the Ethernet Port Indicator LEDs.

Connect network cables

Ethernet ports are mapped to interface IDs during the initial configuration. Determine which Ethernet ports to use for connecting to your networks.

Steps

1) Connect network cables to the Ethernet ports.

If you use the plug-and-play configuration method for a single NGFW appliance, the appliance uses Ethernet port 0 to contact the Installation Server.

Web based NGFW Configuration Wizard runs on port labeled as LAN (port 2).

If the appliance is a node in an NGFW Engine cluster, connect the cable for the heartbeat connection between the nodes to interface labeled as HA (port 3).

Connect the AC power supply

If your appliance has an AC power supply, connect the power cable.



Note

We recommend using a UPS to ensure continuous operation and minimize the risk of damage to the appliance in case of sudden loss of power.

Steps

- 1) Plug the cable to the AC power connector on the back of the appliance.
- 2) Plug the cable to a grounded, high-quality power strip that offers protection from electrical noise and power surges.



Note

Standby power is supplied to the system even when the appliance is turned off.

Connect the DC power supply

Some appliances have a DC power supply that must be wired for power.

Two types of connectors are required for a DC power supply:

Male connector of the type IC 2,5/ 3-STGF-5,08 (fixed)



Female connector of the type MSTB 2,5/ 3-STF-5,08 (removable)





We recommend using a UPS to ensure continuous operation and minimize the risk of damage to the appliance in case of sudden loss of power.

Steps

- 1) Assemble a female connector.
 - a) Locate a copper cable with three wires:
 - 36 to 72V negative terminal (–)
 - Ground connection
 - 36 to 72V positive terminal (+)
 - b) Strip 8 mm of insulation from each of the three wires in the cable.



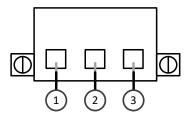
CAUTION

Do not strip more than 8 mm from each wire to avoid leaving uninsulated wire exposed from the female connector.

- c) If necessary, turn the screws on top of the female connector to expose the square holes for inserting the three wires in the connector.
- d) Insert the exposed part of each of the three wires into the female connector. The illustration shows the wiring.

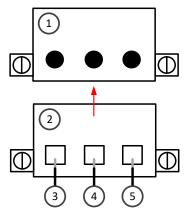
You can configure the DC input feed in three different ways, depending on your environment:

- Negative grounded (+36 to +72VDC)
- Positive grounded (–36 to -72VDC)
- Floating (default)



- 1 Ground connection
- 2 36 to 72V negative terminal (-)
- 3 36 to 72V positive terminal (+)
- Tighten the screws on top of the female connector to lock the wires into place.
- f) If the appliance has a dual-input adapter, assemble the second female connector.

- Connect the mating connectors.
 - a) Insert a female connector into the pre-installed male connector as shown in the illustration.



- Pre-installed male connector
- 2 Female connector
- 3 Green-yellow
- 4 Black or blue
- 5 Red
- b) If the appliance has a dual-input adapter, connect the second female connector to the male connector.
- c) (Optional) Connect a grounding wire to the grounding screw on the back of the appliance.



Standby power is supplied to the system even when the appliance is turned off.

Port settings for plug-and-play configuration method

If you use the plug-and-play configuration method for a single NGFW appliance, the appliance uses Ethernet port 0 to contact the Installation Server.

Make sure that the port settings are configured correctly in the Management Client for the initial configuration. To use the plug-and-play configuration method, the interface that corresponds to Ethernet port 0 in the initial configuration must have a dynamic IPv4 address.

Restoring appliance settings

You can use one of the following methods to restore the appliance settings to the factory default settings:

- If the appliance is connected to the management, use the Reset to Factory Settings command from the management client in SMC to initiate restoring of appliance settings.
- To initiate and complete the reset without using appliance console, connect to the appliance using SSH, and then use the CLI command sg-clear-all --fast to restore the factory default settings on the NGFW Engine.
- From local console boot menu, select System restore options to initiate restoring of appliance settings.
- Press and hold the reset button for few seconds to initiate restoring of appliance settings. For this method to work, appliance must have been powered on and running at least for two minutes. Reset button is located to the right of the PWR2 LED and for example can be pressed with a small pen tip. The system restore is ready when the appliance is switched to standby powered state ("power off"), which is indicated by red colored power LEDs. If serial console is in use, the following messages: "Factory default settings restored" and then "reboot: Power down" in console indicate that the system restore is ready.



Restoring appliance settings does not impact the current software version. This will remain as the latest installed version.

Turn off the appliance

Most Forcepoint NGFW appliance hardware components are not hot-swappable.

You can turn off the appliance using either of the following ways:

- Using Power button
- Using Management Client
- From the NGFW Engine command line

Turn off the appliance using the power button

Power button includes the functions:

- Short press of the power button initiates software interfaces driven graceful power off. This is the recommended way to turn the power off using power button.
- Long press of the power button (over 2 seconds) initiates forceful power off. This option is used only if the appliance does not respond to graceful power off in 30 seconds.

Turn off the appliance using the Management Client



Tip

The SMC administrator can also turn off the appliance remotely using the Management Client. For more information, see the *Forcepoint Next Generation Firewall Product Guide*.

Turn off the appliance from the NGFW Engine command line

Steps

- 1) Connect to the NGFW Engine command line.
 - Depending on the appliance type, use one of the following options:
 - Connect a computer running a terminal emulator program to the appliance console port, then press Enter.
 - Connect using SSH.



Note

SSH access is not enabled by default.

2) Enter the logon credentials.

The user name is root and the password is the one you set for the appliance.

3) Enter the following command:

halt

4) Wait until the power indicator light turns red or is unlit, then unplug all power cables from the appliance.