

FORCEPOINT

Stonesoft Next Generation Firewall

Hardware Guide

Models 105, 110, 115, and 315

Revision E

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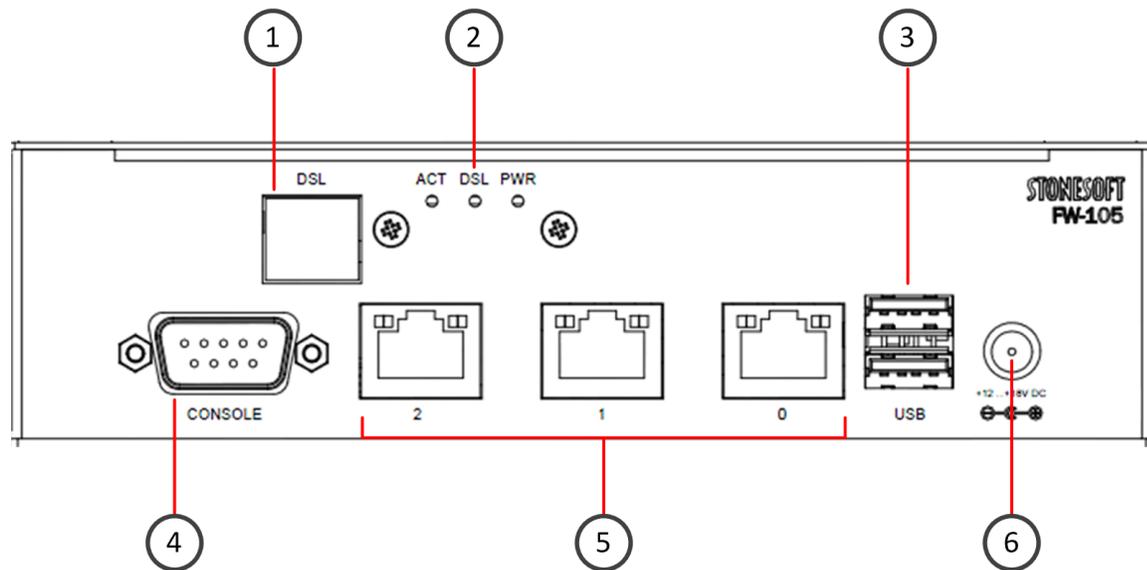
Appliance features

Familiarize yourself with the front panel, back panel, and indicator lights.

Model 105 features

The figures and tables show the appliance components.

Front panel

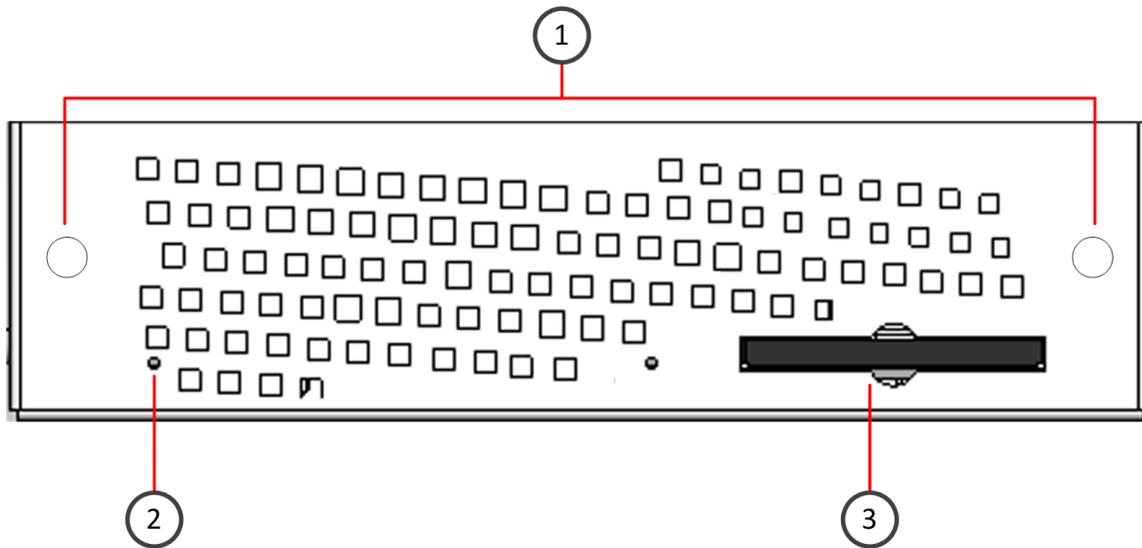


1. (Some appliances) DSL port
2. Activity, DSL, and power indicators
3. USB ports
4. Console port (speed 9600 bps)
5. Ethernet ports 2–0 (from left to right)
6. Power connector



Note: On some Stonesoft NGFW 105 appliances, the power indicator is on the back panel.

Back panel

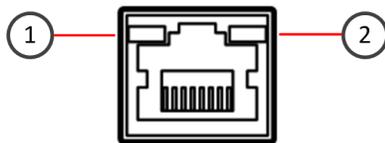


1. (Some appliances) Antenna connectors
2. (Some appliances) Power indicator
3. CompactFlash Card

Indicator lights

Indicator	Color	Description
ACT	Green	A modem connection is up.
DSL	Green	A connection to the digital subscriber line access multiplexer (DSLAM) is up when lit. Blinks when connecting.
PWR	Green	Power is supplied to the system power supply unit.

Ethernet port indicators



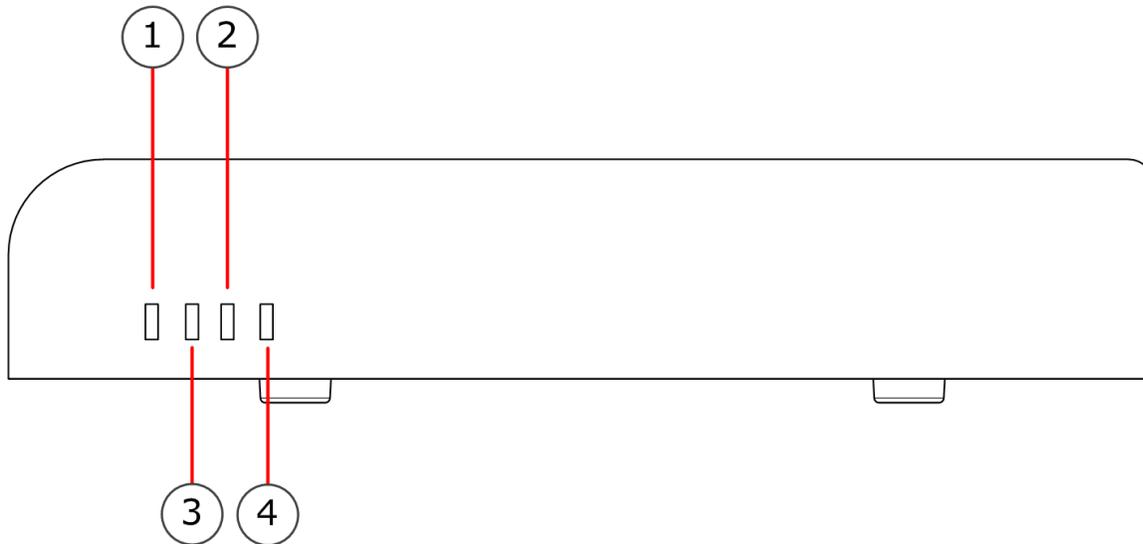
1. Activity/link indicator
2. Status indicator

Component	Color	Description
Activity/link indicator	Green	Link OK when lit, blinks on activity.
Status indicator	Green	Lit while the system has power.

Model 110 features

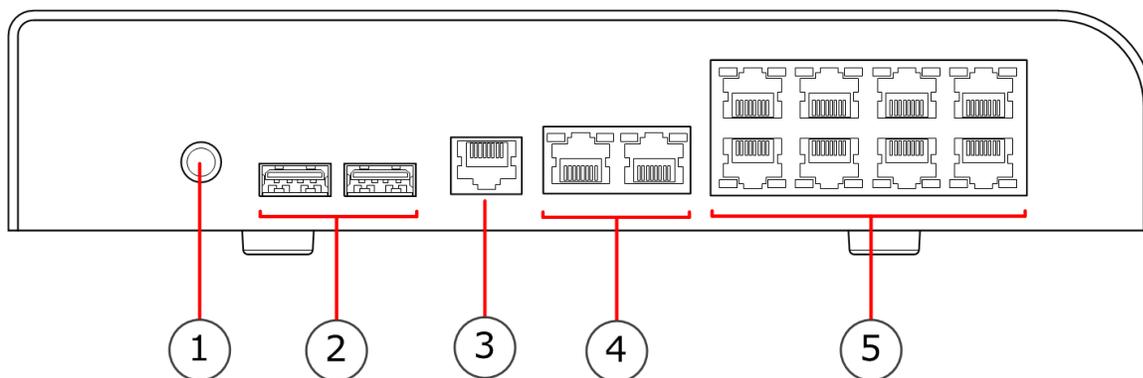
The figures and tables show the appliance components.

Front panel



1. Power indicator
2. Management (MGMT) indicator
3. Status indicator
4. Internet connectivity indicator

Back panel



1. Power connector
2. USB ports
3. Console port (speed 115,200 bps)
4. Fixed Ethernet ports 0–1 (from left to right)
5. Ports 0–7 in the integrated switch (from left to right, 0–3 on the top row and 4–7 on the bottom row)

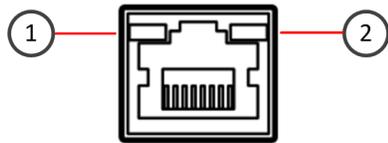


Note: The 110 appliance does not support hardware flow control on the console port. If you do not disable this feature when using a terminal emulator program, you cannot enter commands into the console; you can only view the output.

Indicator lights

Indicator	Color	Description
Power	Green	Power is supplied to the system power supply unit.
Status	Amber	Initial contact is established but the engine is not online. Blinks until initial contact is established.
	Green	The engine is online.
MGMT	Green	Management connection is established.
Internet	Green	Internet connection is up.

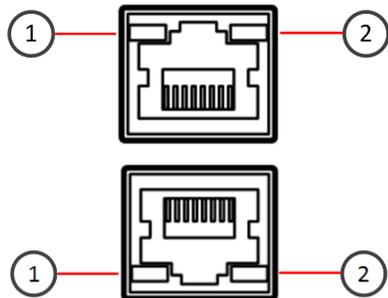
Fixed Ethernet port indicators



1. Activity/link indicator
2. Link speed indicator

Component	Color	Description
Activity/link indicator	Green	Link OK, blinks on activity.
Link speed indicator	Unlit	10 Mbps link
	Amber	100 Mbps link
	Green	1 Gbps

Port indicators in the integrated switch



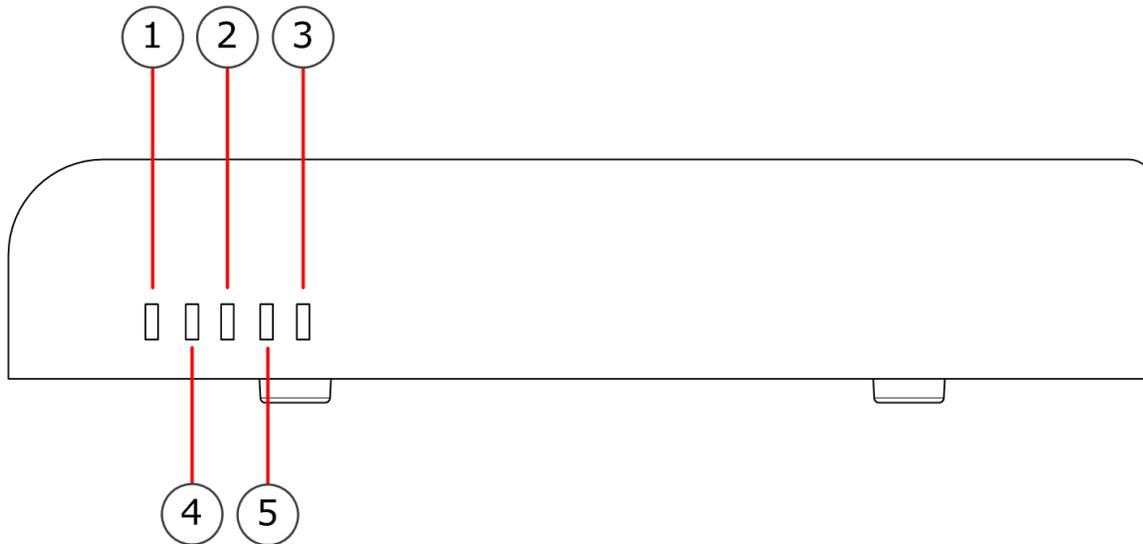
1. Activity/link indicator
2. Link speed indicator

Component	Color	Description
Activity/link indicator	Green	Link OK.
Link speed indicator	Unlit	10 Mbps link
	Amber	100 Mbps link
	Green	1 Gbps

Model 115 features

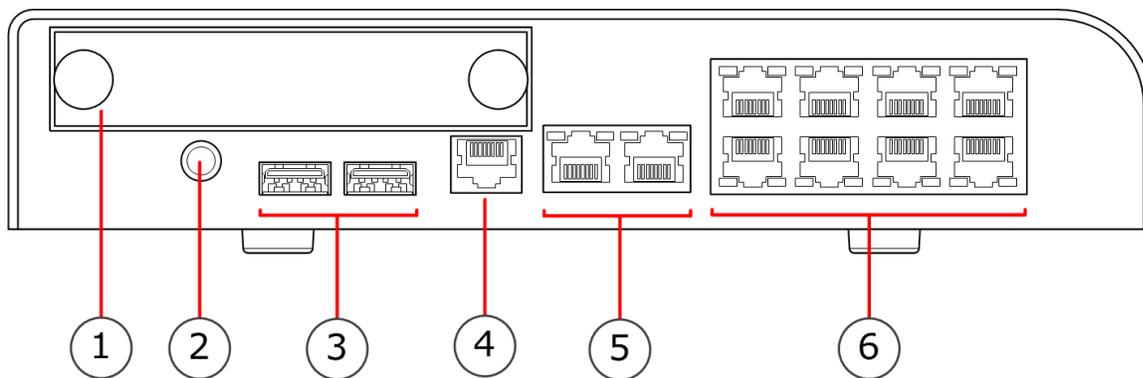
The figures and tables show the appliance components.

Front panel



1. Power indicator
2. Management (MGMT) indicator
3. Wireless LAN (WLAN) connectivity indicator
4. Status indicator
5. Internet connectivity indicator

Back panel



1. Interface module slot
2. Power connector
3. USB ports
4. Console port (speed 115,200 bps)
5. MGMT/WAN Ethernet ports 0-1 (from left to right)
6. Ports 0-7 in the integrated switch (from left to right, 0-3 on the top row and 4-7 on the bottom row)



Note: The 115 appliance does not support hardware flow control on the console port. If you do not disable this feature when using a terminal emulator program, you cannot enter commands into the console; you can only view the output.

Ethernet port names

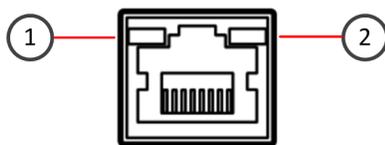
Ethernet port names are based on the slot and port numbers. The first number in the name represents the slot on the appliance. The second number represents the port on the slot. *Example:* eth2_0 is located on port 0 of slot 2.

Component	Slot number	Slot location	Port numbers
Fixed Ethernet ports	0	Back panel	eth0_0 and eth0_1.
Interface modules	1	Back panel	The port numbers start from 0 and increase from left to right. <i>Example:</i> The port farthest to the left in slot 1 is eth1_0.

Indicator lights

Indicator	Color	Description
Power	Green	Power is supplied to the system power supply unit.
Status	Amber	Initial contact is established but the engine is not online. Blinks until initial contact is established.
	Green	The engine is online.
MGMT	Green	Management connection is established.
Internet	Green	Internet connection is up.

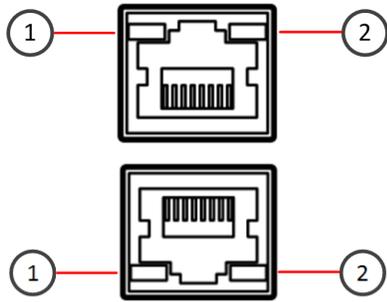
Fixed Ethernet port indicators



1. Activity/link indicator
2. Link speed indicator

Component	Color	Description
Activity/link indicator	Green	Link OK, blinks on activity.
Link speed indicator	Unlit	10 Mbps link
	Amber	100 Mbps link
	Green	1 Gbps

Port indicators in the integrated switch



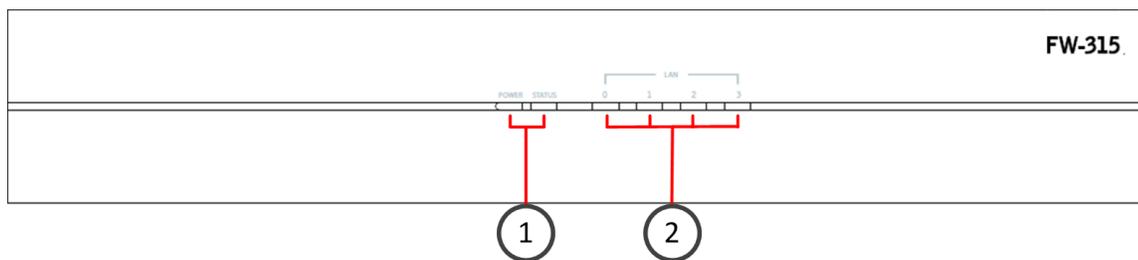
1. Activity/link indicator
2. Link speed indicator

Component	Color	Description
Activity/link indicator	Green	Link OK.
Link speed indicator	Unlit	10 Mbps link
	Amber	100 Mbps link
	Green	1 Gbps

Model 315 features

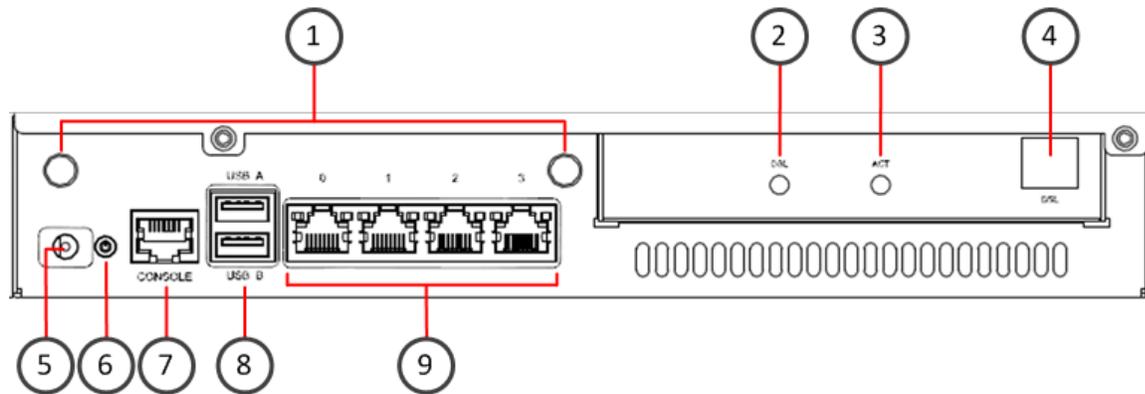
The figures and tables show the appliance components.

Front panel



1. Power and disk activity status indicators
2. Ethernet interface network activity and link

Back panel

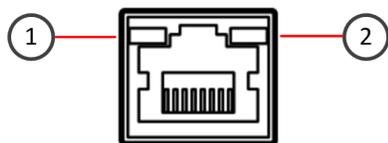


1. (Some appliances) Antenna connectors
2. (Some appliances) DSL indicator
3. (Some appliances) Activity indicator
4. (Some appliances) DSL port (RJ11)
5. Power connector
6. Power button
7. Console port (speed 9600 bps)
8. USB ports
9. Ethernet ports 0–3 (from left to right)

Indicator lights

Indicator	Color	Description
Power	The front and back indicators are blue	Power is supplied to the system power supply unit and the system is operating normally.
	The front and back indicators are unlit	The power is off.
	The front indicator is unlit and the back indicator is red	The appliance is in standby mode. <div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p>Note: When you first connect the appliance to a power source, the light is red. Push the power button to turn on the appliance.</p> </div>
Disk activity status	Magenta	There is hard disk activity.
Ethernet ports 0–3	Unlit	There is no link.
	Green	Link OK.

Ethernet port indicators



1. Activity indicator

2. Link indicator

Status	Description
Both indicators are unlit	No link.
Both indicators are lit	Link OK, activity indicator blinks on activity.

DSL indicators

Indicator	Color	Description
Activity	Green	A modem connection is up.
DSL	Green	A cable is plugged into the DSL port.

Precautions

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

Safety precautions

Read the safety information and follow the procedures whenever you are working with electronic 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.

General safety

Follow these rules to ensure general safety.

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

Operating precautions

- **Power supplies** — Do not open the power supply casing. Only the manufacturer's qualified technician can access and service power supplies.
- **WLAN precautions** — Data traffic by a wireless connection might allow unauthorized third parties to receive data. Take the necessary steps to secure your radio network. See <http://www.wi-fi.org> for information about securing your WLAN.

Restrictions and requirements might apply for authorizing wireless devices. Check with your local authorities for additional information.

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.
- 315 appliances only: The power supply cable must include a grounding plug and must be plugged into a grounded electrical outlet.

Install the appliance

Prepare and install the appliance in your network.

- You have installed a Stonesoft Management Center (SMC) on a separate server.
- You have configured the Firewall element in the Management Client, and saved the initial configuration on a USB drive.



Note: For additional information on SMC installation and initial configuration, see the *Stonesoft Next Generation Firewall Installation Guide*.

- You have inspected the appliance, the delivery box, and all components included in the shipment.



Note: Do not use damaged appliances or components.

Install a 3G modem in the appliance

Install a SIM card into a 3G modem, connect the external antenna, and connect the modem to the appliance.

3G modem parts and indicator lights

The USB drive includes the 3G modem and additional components.

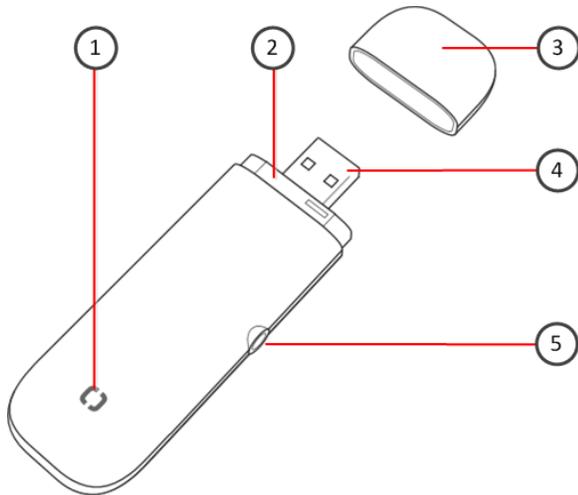


Figure 1: 3G modem parts

1. Indicator light
2. SIM card tray (closed)
3. Protective cover
4. USB plug
5. Antenna connector

Table 1: 3G modem indicator lights

Indicator status	Color	Description
Quickly flashing light	Alternating colors (red, yellow, green, blue, and purple)	Indicates that the modem is searching for a network.
Slowly flashing light	Red	Indicates a problem with the SIM card or that there is no network.
Light continuously on	Any color	Indicates that the modem has found a network.
	Blue	Transfer rate is UMTS.
	Green	Transfer rate is HSPA+/ HSPA.
	Purple	Transfer rate is EDGE.
	Yellow	Transfer rate is GPRS.

Install the SIM card

Install the SIM card into the 3G modem.

We recommend disabling the PIN on the SIM card using a mobile phone or another method.

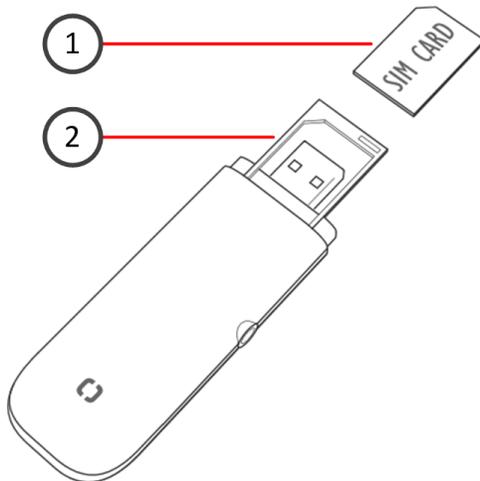


Figure 2: 3G modem with cover open

1. SIM card
2. SIM card tray (opened)

1. Remove the protective cover from the modem.
2. Carefully pull out the SIM card tray located next to the USB plug.
3. Insert a SIM card into the tray.
Make sure that the beveled corner of the SIM card is facing the top of the modem.
4. Push the SIM card tray back in.

Connect the external antenna

Use the external antenna with the modem for optimal speed and performance.

1. Open the protective cover of the antenna connector at the side of the modem, and pull out the cover slightly.
2. Insert the antenna cable firmly to the antenna connector.
3. Attach the antenna to the wall with the two self-adhesive fastening strips included in the shipment.
 1. Attach one strip to the surface of the antenna and the other strip to the wall surface.
 2. Position the antenna so the transmission level is optimal; for example, near a window that faces the direction of a base station.

Connect the 3G modem to an appliance

Insert the modem in a USB port on the appliance.



Important: For safety reasons, we recommend using the USB extension cable when you connect the 3G modem to an appliance.

1. Attach the USB extension cable to the USB plug of the modem.
2. Connect the USB extension cable to a USB port on the appliance.

Change the 3G modem SIM card

If necessary, replace the SIM card and update the interface information.

We recommend that you use a mobile phone or other method to disable the PIN on the SIM card before installation.

1. Disconnect the modem USB extension cable from the USB port on the appliance.
2. Carefully pull out the SIM card tray.
3. Remove the existing SIM card from the tray.
4. Insert the new SIM card into the tray.
5. Push the SIM card tray back in.
6. Attach the USB extension cable to the modem and to the USB port on the appliance.
7. Using the Management Client, modify the interface details according to your service provider's instructions.
8. Refresh the engine policy in the Management Client to transfer the configuration changes.

Mount a 105 appliance

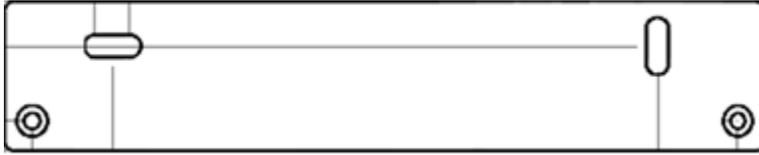
You can mount a 105 appliance to a wall or place the appliance on a horizontal surface such as a desk or rack shelf.

The bracket and screws are not included by default. You can order them separately.

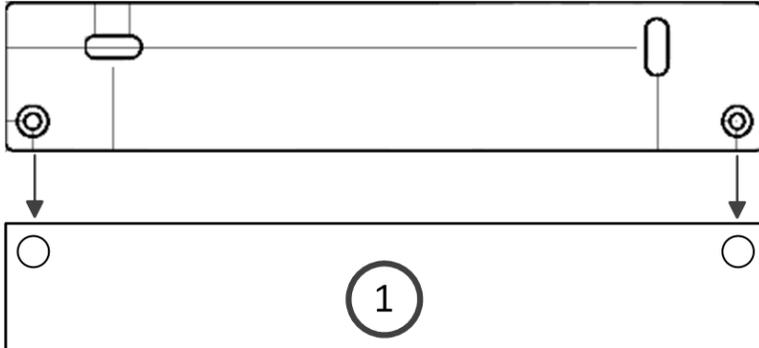


Note: Use the appropriate screws for the surface you are mounting the appliance on. Make sure that the screws are long enough to provide sufficient support for the appliance.

1. Locate the bracket and the two screws.



2. Use a screwdriver to remove the four rubber plugs from the bottom of the appliance.
3. Line up the two smaller holes in the bracket with the two holes at the bottom of the appliance.



1. Bottom of appliance

4. Use the screws to attach the bracket to the bottom of the appliance.



Important: Do not attach the bracket to the appliance with screws longer than 4 mm. Longer screws can damage the appliance motherboard and void the warranty.

5. Attach the other bracket to the bottom of the appliance.
6. Use two screws to attach the bracket to a wall through the larger holes in the bracket (additional screws are not included in the shipment).



Note: Mount the appliance so that you can easily view the indicators on the front panel.

7. For appliances with wireless support, position the antennas up or down.

Mount a 110 or 115 appliance

You can mount a 110 or 115 appliance to a wall or place the appliance on a horizontal surface such as a desk or rack shelf.

1. Locate the two screws that are included in the appliance delivery.
2. Attach the two screws to the wall.



Note: Make sure that the spacing of the screws matches the spacing of the two holes on the bottom of the appliance.

3. Align the two holes on the bottom of the appliance over the two screws and slide the appliance down to secure the appliance in place.

Install a 315 appliance in a rack

You can install a 315 appliance in a rack or place the appliance on a horizontal surface such as a desk or rack shelf.

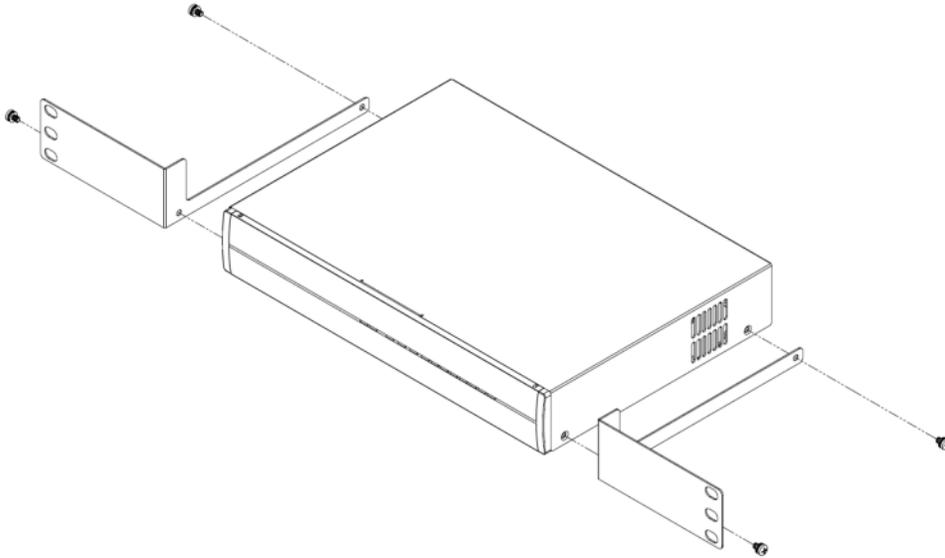
The brackets and screws are not included by default. You can order them separately.

1. Unscrew the pair of screws from both sides of the appliance.



CAUTION: Do not reuse these screws for attaching the brackets. The screws are not long enough to properly attach the brackets.

2. Attach the brackets to the appliance using two screws for each bracket.
The narrow part of the bracket attaches toward the back of the appliance.



3. If you are not leaving a space between appliances in the rack, remove the rubber feet from the bottom of the appliance.
4. Attach each bracket to the rack using screws and cage nuts through the holes on the wide part of the brackets.

Connect antennas and cables

Connect the antennas, power supply cable, and network cables.



Note: Only some Stonesoft NGFW desktop appliances support wireless connections.

Network settings and cables

Follow these network settings and cable guidelines.

Copper cable types

Use at least CAT5e-rated cables for gigabit networks.

Speed and duplex settings

Network interfaces at both ends of each cable must have identical speed and duplex settings. This includes 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 settings are not allowed at gigabit speeds.

Connect the antennas

If your appliance has WLAN support, connect the antennas.

1. Install the antennas to the two connectors on the back panel of the appliance.
2. Tighten the knurled nuts at the base of the antennas to secure them firmly to the appliance.
3. Position the antennas.

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.



Note: In appliances that have WLAN support, the port number of the integrated wireless network card is 3 for 105 appliances, 1 for 115 appliances, and 5 for 315 appliances.



Note: In the 110 and 115 appliances, the ID of the integrated switch is 0.

1. Connect network cables to the Ethernet ports.
If you use the plug-and-play method, connect a cable to Ethernet port 0 for contacting the Installation Server.
 - **105 appliances** — The ports are numbered 2–0 from left to right.
 - **110 appliances** — The ports are numbered 0–1 from left to right.
 - **115 appliances** — The ports are numbered 0–1 from left to right.



Note: Port 0 is the MGMT port, and port 1 is the WLAN port.

- **315 appliances** — The ports are numbered 0–3 from left to right.
2. If the appliance has DSL support, connect the cable to the RJ11 DSL port.
The DSL port number is 4.



CAUTION: To reduce the risk of fire, use only a 26 AWG or larger (for example, 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord.

3. If the appliance has an integrated switch, connect the cables to the ports in the integrated switch.
The ID of the integrated switch is 0. The ports are numbered from left to right: 0–3 on the top row and 0–1 on the bottom row.
4. (Optional) Connect a 3G modem to one of the USB ports.
The port number of the 3G modem is 0.

Connect the power supply

Use the power cable to plug in the appliance.



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.



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

1. Connect the power cable to the power connector.

- **105 appliances** — The power connector is on the front of the appliance.
 - **110 and 115 appliances** — The power connector is on the back of the appliance.
 - **315 appliances** — The power connector is on the back of the appliance.
2. Plug the power cable into a grounded, high-quality power strip that offers protection from electrical noise and power surges.

Default port settings for plug-and-play

The appliance uses the default port settings when contacting the Installation Server using the plug-and-play method.

Different ports are available to contact the Installation Server. Make sure the port settings are configured correctly in the Management Client for the initial configuration. If one method fails, the appliance uses the next port.

Table 2: Plug-and-play port order and settings

Order	Port type	Default settings
1	3G modem port	<ul style="list-style-type: none"> • Access Point Name — internet • Phone number — *99# • PIN Code — <Empty value> <div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 5px; margin-top: 10px;">  Note: You must disable the PIN on the modem. </div>
2	ADSL port	Set the ADSL Service Provider to Automatic in the initial configuration. For a list of the predefined ADSL settings, see Knowledge Base article 9742 .
3	Ethernet port 0	The corresponding interface in the initial configuration must have a dynamic IPv4 address.

How the integrated switch works

The integrated switch of the 110 and 115 appliances enable you to configure port groups. The Stonesoft NGFW engine does not inspect traffic between ports in the same port group.



Note: You can only use the integrated switch if the appliance has been configured as a Single Firewall. You cannot use the integrated switch as an external switch device without Stonesoft NGFW properly configured and running. Only the 110 or 115 appliance can use the integrated switch.

When the Stonesoft NGFW engine is in the initial configuration state and no configuration has been saved to the integrated switch, ports in the integrated switch are not configured into port groups and the integrated switch does not yet route traffic. After a configuration has been saved, traffic is allowed between ports in the same port group according to the configuration even if you reboot the appliance.

If you turn off the appliance, the port group configuration is reset and traffic between the ports in the same port group is interrupted. The last saved port group configuration is automatically applied to the appliance when the appliance has been turned on again.



Note: The ports in the integrated switch of the 110 and 115 appliances do not support VLAN tagging.

Compliance information

Stonesoft NGFW appliances that have wireless support are in compliance with the EMC directive (2014/30/EU) and the FCC standard (FCC Part 15) for wireless devices intended for home and office use.

This information is valid for all dual band products (2.4 GHz, IEEE 802.11b/g/n, and 5 GHz, IEEE 802.11n).

The supported channels and frequencies for Stonesoft NGFW appliances are listed by country in the Management Client. The wireless configuration is transferred to the appliance when you install the policy on the engine.

Applied technologies

The appliance uses these technologies.

- **Radio spectrum** — Sub-bands 2400–2483,5 MHz, 5150–5250 MHz, 5250–5350 MHz, and 5470–5725 MHz
- **Safety** — Dual band products
- **Electromagnetic Compatibility (EMC)** — Dual band products

National restrictions and requirements for authorization

These appliances can be operated within FCC DFS2 band or ETSI/EC DFS band, or other countries that regulate or plan to regulate mid-5 GHz band.

The usage of mid-5 GHz band is subject to the regulatory approval alone with the resided devices.

The requirements for any country or area might change. We recommend that you check with your local authorities for the latest status of national requirements for 2.4 GHz and 5 GHz wireless LANs.

Find product documentation

On the Forcepoint support website, 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 on the Forcepoint support website at <https://support.forcepoint.com>. There, you can access product documentation, Knowledge Base articles, downloads, cases, and contact information.

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