Thank you for choosing Sourcefire!
Before installing this device, download and follow the instructions in the Sourcefire Support Welcome Kit (https://support.sourcefire.com) to get started with Sourcefire Support, and to set up your Customer Center account.

Included items:
- one of the following Sourcefire devices:
  - 3D8120 (1U model)
  - 3D8130 (1U model)
  - 3D8140 (1U model)
  - AMP8150 (1U model)

The 3D8120/8130/8140 have identical chassis. If you are not sure which model you have, see your packing list.

- 3D8250 (2U model)
- 3D8260 (4U stacked model), which includes a 3D8250 10G-capable primary device and one secondary (expansion) device
- 3D8270 (6U stacked model), which includes a 3D8250 40G-capable primary device and two secondary (expansion) devices
- 3D8290 (8U stacked model), which includes a 3D8250 40G-capable primary device and three secondary (expansion) devices
- 3D8350 (2U model)
- 3D8360 (4U stacked model), which includes a 3D8350 40G-capable primary device and one secondary (expansion) device
- 3D8370 (6U stacked model), which includes a 3D8350 40G-capable primary device and two secondary (expansion) devices
- 3D8390 (8U stacked model), which includes a 3D8350 40G-capable primary device and three secondary (expansion) devices
- a combination of Network Modules (NetMods)
- stacking module: optional for 3D8140, 3D8250, and 3D8350; included for 3D8260/8270/8290 and 3D8360/8370/8390
- two power cords per chassis
- two straight-through Cat 5e Ethernet cables per chassis
- rack-mounting kit per chassis

Required items:
- flathead and Phillips screwdrivers for rack-mounting kit

8000 Series Modules

Configurable Bypass NetMods
- Quad Port 1000BASE-T Copper Bypass NetMod
- Quad Port 1000BASE-SX Fiber Bypass NetMod
- Quad Port 1000BASE-SX Fiber Non-Bypass NetMod
- Quad Port 10GBASE-SR4 or LRM Fiber Bypass NetMod
- Dual-Port 10GBASE-SR4 Fiber Bypass NetMod (3D81xx only)

Non-Bypass NetMods
- Quad Port 1000BASE-T Copper Non-Bypass NetMod
- Quad Port 1000BASE-SX Fiber Non-Bypass NetMod
- Quad Port 10GBASE-SR4 or LRM Fiber Non-Bypass NetMod

Stacking Module (3D81xx, 3D82xx, 3D83xx only)

See page 3 for more information.
Deploying the Device

Your device is typically deployed inside a firewall, where it is connected to your trusted management network and the various network segments you want to monitor.

In a simple deployment scenario, you connect the management interface on your device to your trusted management network using an Ethernet cable, then connect the sensing interfaces to the network segments you want to monitor using the appropriate cables (copper or fiber) in either a passive or inline cabling configuration.

The trusted management network (a restricted network protected from unauthorized access) may have a single secure connection to the Internet for security updates and similar functions, but is separate from the rest of your network and is not accessible to hosts used in daily business operations.

You can connect sensing interfaces to different network segments dedicated to particular components of your business that have distinct security requirements to target policies based on the needs for specific segments. These segments can include the DMZ (outward-facing servers, such as mail, ftp, and web hosts), your internal network (hosts used in daily operation and similar applications), and the core (hosts reserved for critical business assets), and can also include segments dedicated to remote locations, mobile access, or other functions.

How you cable your sensing interfaces determines your configuration options. If you use passive cabling, you can configure passive sensing interfaces. If you use inline cabling, you can create passive, inline, inline with fail-open, virtual switch, virtual router, or hybrid sensing interfaces on your device. For more information on deployment options and interface configurations and how they affect product features, see the Sourcefire 3D System User Guide and the Sourcefire 3D System Installation Guide.

Cabling the Device

You can cable your device to configure passive or inline interfaces, depending on your deployment needs.

Use passive cabling if you want to:
- monitor traffic
- collect information about hosts, operating systems, applications, users, files, networks, and vulnerabilities

Use inline cabling if you want to use the same features as a passive deployment, plus:
- configure a virtual switch, virtual router, or hybrid interface
- perform network address translation (NAT)
- use policies to block traffic based on access control features such as application control, user control, security intelligence, URL dispositions, file control, malware detection, or intrusion prevention

Use the appropriate cables (as indicated by your interface) and cabling diagram for the interface you want to configure, then use the web interface on the Defense Center to configure the interfaces. See Connecting the Sensing Interfaces on page 4.
NetMods

Network modules (NetMods) contain up to four copper or fiber, configurable bypass or non-bypass, sensing interfaces in either 1G, 10G, or 40G (3D8250 and 3D8350 primary device) capacity. Install NetMods on the primary device only, and one stacking module for each secondary device connected the primary device.

Use a single interface to passively monitor a network segment, or use paired interfaces in an inline configuration to deploy the device inline or inline with configurable bypass, or to configure a virtual switch, virtual router, or hybrid interface on the monitored network segment.

As an example, a NetMod with four sensing interfaces (copper or fiber) can be used to monitor:
- up to four network segments in a passive configuration
- up to two network segments in an inline configuration
- one network segment in an inline configuration and up to two network segments in a passive configuration

If you want to take advantage of the device’s configurable bypass (fail-open) capability, you must connect either the two interfaces on the left or the two interfaces on the right of a configurable bypass NetMod to a network segment. This allows traffic to flow even if the device fails or loses power. Configure the interface set as inline with fail-open using the web interface on the Defense Center.

Quad-Port 1000BASE-T Copper Configurable Bypass NetMod
  Cable: standard copper
  Passive configurations: 1, 2, 3, or 4
  Inline configurations: 1 or 2 (left pair or right pair)

Quad-Port 1000BASE-SX Fiber Configurable Bypass NetMod
  Cable: Local Connector (LC) optical transceivers
  Passive configurations: 1, 2, 3, or 4
  Inline configurations: 1 or 2 (left pair or right pair)

Dual-Port 10GBASE Fiber Configurable Bypass NetMod
  Cable: Local Connector (LC) optical transceivers, either MMSR or SMLR
  Passive configurations: 1 or 2
  Inline configurations: 1

Dual-Port 40GBASE-SR4 Fiber Configurable Bypass NetMod
  For use only with 3D8270/8290, 3D8370/8390 or 40G-capable 3D8250/8260 or 3D8350/8360
  Cable: Multiple-Fiber Push On (MPO) connector optical transceivers
  Passive configurations: 1 or 2
  Inline configurations: 1

Quad-Port 1000BASE-T Copper Non-Bypass NetMod
  Cable: standard copper
  Passive configurations: 1, 2, 3, or 4
  Inline configurations: 1 or 2 (left pair or right pair)

Quad-Port 1000BASE-SX Fiber Non-Bypass NetMod
  Cable: Local Connector (LC) optical transceivers
  Passive configurations: 1, 2, 3, or 4
  Inline configurations: 1 or 2 (left pair or right pair)

Quad-Port 10GBASE-SR or LR Fiber Non-Bypass NetMod
  Cable: Local Connector (LC) optical transceivers
  Passive configurations: 1, 2, 3, or 4
  Inline configurations: 1 or 2 (left pair or right pair)

Stacking Module

A stacking module connects two like devices to increase the power of the primary device. A 3D8140 can be connected to another 3D8140 (not available for 3D8120/8130). You can connect a total of four 3D8250s or four 3D8350s. Note that you cannot connect a 3D8250 to a 3D8350. For more information, see Stacking Configurations on page 6.

Stacking Module
  Cable: 8000 Series stacking cable
  3D8140: one per connection; up to two 3D8140 appliances
  3D8250/8260/8270/8290: two per connection on up to four 3D8250 appliances
  3D8350/8360/8370/8390: two per connection on up to four 3D8350 appliances
Connecting the Sensing Interfaces

This section describes the physical connection of the sensing interfaces. After you cable the interfaces, use the web interface on the Defense Center that manages the device to configure the device's sensing interfaces as passive, inline, inline with fail-open, switched, routed, or hybrid. Use only the interfaces on the front of the device as sensing interfaces.

See the Sourcefire 3D System Installation Guide for detailed information on planning your deployment. After you have selected a deployment model, cable the sensing interfaces as needed for your configuration.

Passive Interface Cabling

For each network segment you want to monitor passively, connect the appropriate cables (either fiber or copper) to one sensing interface. Use this cabling when you want to configure passive interfaces.

Inline Interface Cabling

For each network segment you want to monitor inline, connect the appropriate cables (either fiber or copper) sequentially to pairs of sensing interfaces. Use this cabling when you want to configure inline, inline with fail-open, switched, routed, or hybrid interfaces.

If you want to take advantage of the device's configurable fail-open capability, cable the interfaces, then use the web interface on the Defense Center that manages the device to configure the interface as inline with fail-open.
Stacking Devices

You can stack devices in the following configurations:

- two 3D8140s (not available for 3D8120/8130)
- up to four 3D8250s or up to four 3D8350s
  - a 3D8260 (a 10G-capable primary device and a secondary device)
  - a 3D8360 (a 40G-capable primary device and a secondary device)
  - a 3D8270 or 3D8370 (a 40G-capable primary device and two secondary devices)
  - a 3D8290 or 3D8390 (a 40G-capable primary device and three secondary devices)

One device is designated as the primary device and is connected to the network segments. All other devices are designated secondary devices, and are used to provide additional resources to the primary device.

Connect the primary device to the network segments you want to analyze in the same way that you would connect a single 3D8140, 3D8250, or 3D8350. Connect the secondary devices to the primary device as indicated in the stack cabling diagram. If a secondary device contains sensing interfaces, those interfaces are not used.

After the devices are physically connected to the network segments and to each other, use a Defense Center to establish and manage the stack. See the Sourcefire 3D System Installation Guide for complete information about using devices in stacked configurations.

Cabling Diagrams

Using the 8000 Series Stacking Cable

Install the devices within reach of the three-foot (one-meter) 8000 Series stacking cable to create the physical connection between the primary and secondary devices. Stacking two 3D8140s requires one cable. Stacking the 3D8250/8260/8270/8290 or 3D8350/8360/8370/8390 requires two cables per connection. Devices do not need to be powered down to insert or remove the stacking cable.

To use the 8000 Series stacking cable:

- To insert the cable, hold the cable end with release tab facing up, then insert the keyed end into the port on the stacking module until you hear the latch click into place.
- To remove the cable, pull on the release tab to release the latch, then remove the cable end.
Installing the Device

The Sourcefire 3D System is delivered on different hardware platforms that you can rack-mount. When you install a device, make sure that you can access the device's console for initial setup.

You can access the console for initial setup using a keyboard and monitor with KVM, or using an Ethernet connection to the management interface.

Keyboard and Monitor/KVM

You can connect a USB keyboard and VGA monitor to any Sourcefire device, which is useful for rack-mounted devices connected to a keyboard, video, and mouse (KVM) switch.

IMPORTANT! Do not use a KVM switch with USB mass storage to access the device because the device may attempt to use the mass storage device as a boot device.

Ethernet Connection to Management Interface

Configure a local computer, which must not be connected to the internet, with the following network settings:

- **IP address:** 192.168.45.2
- **netmask:** 255.255.255.0
- **default gateway:** 192.168.45.1

Using an Ethernet cable, connect the network interface on the local computer to the management interface on the device. To interact with the device, use terminal emulation software such as HyperTerminal or XModem with the following software settings:

- 9600 baud
- 8 data bits
- no parity checking
- 1 stop bit
- no flow control

Note that the management interface on a physical Sourcefire device is preconfigured with a default IPv4 address. However, you can reconfigure the management interface with an IPv6 address as part of the setup process.

To install the device:

1. Mount the device in your rack using the mounting kit and its supplied instructions.

2. Connect to the device using either a keyboard and monitor or an Ethernet connection.
   - If you are using a keyboard and monitor to set up the device, use an Ethernet cable now to connect the management interface to a protected network segment.
   - If you plan to perform the initial setup process by connecting a computer directly to the device's physical management interface, you will connect the management interface to the protected network when you finish setup.

3. Connect the sensing interfaces to the network segments you want to analyze using the appropriate cables for your interfaces: See Connecting the Sensing Interfaces on page 4.

4. Attach the power cord to the device and plug into a power source.
   - If your device has redundant power supplies, attach power cords to both power supplies and plug them into separate power sources.

5. Turn on the device.
   - If you are using a keyboard and monitor to set up the device, continue with Configuring Network Settings Using a Script in the Sourcefire 3D System Installation Guide.
   - If you are using a direct Ethernet connection to set up the device, confirm that the link LED is on for both the network interface on the local computer and the management interface on the device. If the management interface and network interface LEDs are not lit, try using a crossover cable. For more information, see Cabling Inline Deployments on Copper Interfaces in the Sourcefire 3D System Installation Guide.

6. After you have configured network settings, make sure the device is connected to the protected management network with an Ethernet cable and continue the initial setup with Initial Setup: Devices in the Sourcefire 3D System Installation Guide.
   - You can find detailed information on additional configuration options (such as testing an inline bypass configuration, reconfiguring your console output, and so on) in the Sourcefire 3D System Installation Guide.
Module LEDs

### COPPER NETMODS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAD-PORT 1000BASE-T COPPER</td>
<td>CLASSICAL BYPASS</td>
</tr>
<tr>
<td>QUAD-PORT 1000BASE-T COPPER</td>
<td>CLASSICAL NON-BYPASS</td>
</tr>
</tbody>
</table>

#### Copper Link/Activity LEDs

- **Link (left) amber**: The speed of the traffic on the interface is 10Mb or 100Mb.
- **Link (left) green**: The speed of the traffic on the interface is 1Gb.
- **Activity (right) blinking green**: The interface has link and is passing traffic.

#### Fiber Activity/Link LEDs

- **Activity (top)**: Inline or passive: the light is on when the interface has activity. If dark, there is no activity.
- **Link (bottom)**: Inline: the light is on when the interface has link. If dark, there is no link. Passive: the light is always on.

#### Bypass LED (all)

- **Off**: The interface is not in bypass mode or has no power.
- **Steady green**: The interface is ready to enter bypass mode.
- **Steady amber**: The interface has been placed in bypass mode and is not inspecting traffic.
- **Blinking amber**: The interface has failed open and is in bypass mode.

#### Stacking Module

- **Top (activity)**: If the LED is blinking, there is activity. If the LED is off, there is no activity.
- **Bottom (link)**: If the LED is on, the link is up. If the LED is off, there is no link or the port is in a "down" state.

---

### NETMOD WARNINGS!

- NetMods are not hot-swappable. See the Sourcefire Module Assembly Guide for more information on installing NetMods.
- The small form-factor pluggable (SFP) transceivers on the quad-port 10GBASE fiber non-bypass NetMod are not removable. Any attempt to remove the SFPs can damage the NetMod.

### Quick Start Guide - 8000 Series Devices

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2014-5.3-3
## Hardware Specifications

### Physical and Environmental Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>3DB120/8130/8140, AMP8150</th>
<th>3DB250/8260/8270/8290</th>
<th>3DB350/8360/8370/8390</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Factor</td>
<td>1U</td>
<td>2U/4U/6U/8U</td>
<td></td>
</tr>
<tr>
<td>Dimensions (D × W × H)</td>
<td>28.7” x 17.2” x 1.73” (72.8 cm x 43.3 cm x 4.4 cm)</td>
<td>29.9” x 17.2” x 3.48” (75.3 cm x 43.3 cm x 8.82 cm)</td>
<td>68 inches (each 2U appliance)</td>
</tr>
<tr>
<td>Weight (max installed)</td>
<td>43.5 lbs (19.8 kg)</td>
<td>58 lbs (25.3 kg)</td>
<td>67 lbs (30.5 kg)</td>
</tr>
<tr>
<td>Power Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>650W dual redundant (1+1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Voltage</td>
<td>100VAC to 240VAC nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>48V/DC nominal referenced to RTN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Current</td>
<td>5.2A max over full range, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Current</td>
<td>11A maximum, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max normal operating noise</td>
<td>9.9 dBm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Voltage</td>
<td>100VAC to 240VAC nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>48V/DC nominal referenced to RTN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Current</td>
<td>8A max over full range, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Current</td>
<td>18A maximum, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>750W dual redundant (1+1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Voltage</td>
<td>100VAC to 240VAC nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>48V/DC nominal referenced to RTN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Current</td>
<td>8A max over full range, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Current</td>
<td>18A maximum, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1600W dual redundant (1+1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Voltage</td>
<td>100VAC to 240VAC nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>48V/DC nominal referenced to RTN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Current</td>
<td>11A max over full range, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Current</td>
<td>25A maximum, per supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>10°C to 35°C (50°F to 95°F)</td>
<td></td>
<td>5°C to 40°C (41°F to 104°F)</td>
</tr>
<tr>
<td>Non-Operating Temperature</td>
<td>-20°C to 70°C (-4°F to 158°F)</td>
<td></td>
<td>-10°C to 70°C (14°F to 158°F)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>5% to 85%, non-condensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altitude</td>
<td>0 (sea level) to 6000 ft (0 to 1800 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airflow</td>
<td>Front to back, 160 ft3 (4.5 m3) per minute</td>
<td>Fr</td>
<td>3D8350/8360/8370/8390</td>
</tr>
<tr>
<td>RoHS</td>
<td>Complies with RoHS Directive 2002/95/EC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Optical NetMod Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>1000BASE-SX</th>
<th>10GBASE-SR</th>
<th>10GBASE-LR</th>
<th>40GBASE-SR4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical connectors</td>
<td>All optical connectors are LC duplex</td>
<td>All optical connectors are LC duplex</td>
<td>All optical connectors are LC duplex</td>
<td>All optical connectors are OTP/MTP single row twelve fiber positions. Only the outer eight fibers are used.</td>
</tr>
<tr>
<td>Bit rate</td>
<td>1000Mbps</td>
<td>10,000Gbps</td>
<td>10,000Gbps</td>
<td>40,000Gbps</td>
</tr>
<tr>
<td>Baud rate/encoding/</td>
<td>1250Mbps / 8b/10b encoding /</td>
<td>10,3125Gbps / 64/66b encoding /</td>
<td>10,3125Gbps / 64/66b encoding /</td>
<td>10,3125Gbps / 64/66b encoding /</td>
</tr>
<tr>
<td>tolerance</td>
<td>+/- 100 ppm</td>
<td>+/- 100 ppm</td>
<td>+/- 100 ppm</td>
<td>+/- 100 ppm</td>
</tr>
<tr>
<td>Optical interface</td>
<td>Multimode</td>
<td>Single mode only</td>
<td>Multimode</td>
<td>Multimode</td>
</tr>
<tr>
<td>Operating distance</td>
<td>250 m (868 ft) for 62.5 μm/125 μm fiber</td>
<td>26 m (85 ft) to 33 m (108 ft) for 62.5 μm/125 μm fiber (modal BW 160 to 200 respectively)</td>
<td>26 m (85 ft) to 33 m (108 ft) for 50 μm/125 μm fiber (modal BW 200 to 260 respectively)</td>
<td>2 m to 10 km for 9 μm/125 μm fiber</td>
</tr>
<tr>
<td>Transmitter wavelength</td>
<td>770-860 nm (850 nm typical)</td>
<td>840-860 nm (850 nm typical)</td>
<td>1270-1355 nm (1310 nm typical)</td>
<td>840-860 nm (850 nm typical)</td>
</tr>
<tr>
<td>Maximum average launch power</td>
<td>0 mBm</td>
<td>-1 dBm</td>
<td>-0.5 dBm</td>
<td>2.4 dBm</td>
</tr>
<tr>
<td>Minimum average launch power</td>
<td>-0.5 dBm</td>
<td>-0.5 dBm</td>
<td>-0.5 dBm</td>
<td>2.4 dBm</td>
</tr>
<tr>
<td>Maximum average power at receiver</td>
<td>0 dBm</td>
<td>-1 dBm</td>
<td>-0.5 dBm</td>
<td>2.4 dBm</td>
</tr>
</tbody>
</table>

**WARNING!**

This Sourcefire device should be installed and maintained by qualified personnel only. Keep in mind the following safety information to avoid system damage or personal injury:

- Remove all factory packaging before using the device.
- Provide adequate ventilation to prevent overheating. Do not cover or block vents, or otherwise enclose the device.
- The device must be properly grounded when connecting power to the power outlet.
- At all times, keep the chassis area free from dust.
- Remove all factory packaging before using the device.

For more information, contact support@sourcefire.com

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