



FORCEPOINT

Sidewinder

Hardware Guide

Models S1104, S2008, S3008

Revision D

Table of contents

- Preface..... 3**
 - Find product documentation..... 3
- 1 Introducing the appliances..... 4**
 - Models and features..... 4
 - Supported software..... 6
 - Network ports and NICs..... 6
 - Types of management ports..... 7
 - eUSB support..... 8
 - Regulatory information..... 8
- 2 Configuring the management ports..... 10**
 - Configure a dedicated management port..... 10
 - Configure the Remote Management Module..... 10
- 3 Re-imaging an appliance..... 13**
 - Update the eUSB device..... 13
 - Re-image the appliance using the eUSB device..... 14
 - Download the USB image and write it to a USB drive..... 15
 - Re-image the appliance using a USB drive..... 15
- 4 Diagnosing hardware problems..... 17**
 - Run hardware diagnostics..... 17
 - View the system event log..... 18
 - S1104 control panel indicator lights..... 19
 - S2008 and S3008 control panel indicator lights..... 20

Preface

This guide provides the information you need to configure, use, and maintain your product.

Find product documentation

On the **ServicePortal**, you can find information about a released product, including product documentation, technical articles, and more.

1. Go to the **ServicePortal** at <https://support.mcafee.com> and click the **Knowledge Center** tab.
2. In the **Knowledge Base** pane under **Content Source**, click **Product Documentation**.
3. Select a product and version, then click **Search** to display a list of documents.

Introducing the appliances

The features and capabilities of models S1104, S2008, and S3008 allow you to plan and configure an appliance.

Models and features

Forcepoint™ Sidewinder® models S1104, S2008, and S3008 include the following features.

Table 1: Model features

Model	Network ports	Dedicated management port?	Remote Management Module?	Integrated SSL accelerator?	Rack height
S1104	4	No	No	No	1U
S2008	8	Yes	No	No	1U
S3008	8	Yes	Yes	Yes	1U

Model S1104

This figure shows the attributes of model S1104.

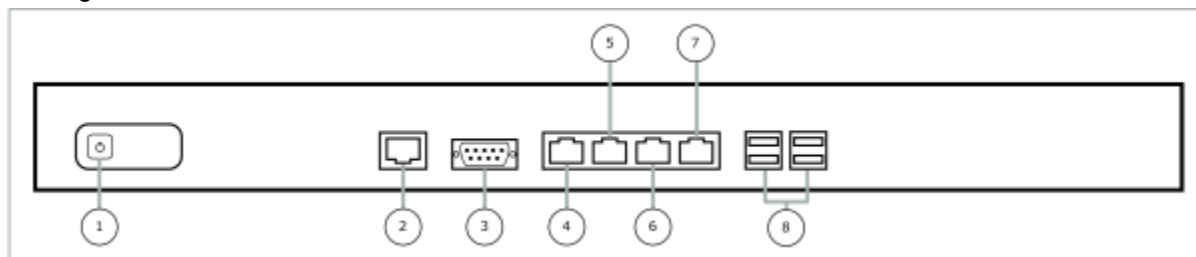


Figure 1: Model S1104 front panel

Number	Description
1	Power button
2	RS-232 serial port
3	VGA port
4	Network port 1-0
5	Network port 1-1
6	Network port 1-2
7	Network port 1-3
8	USB ports

Model S2008

This figure shows the attributes of model S2008.

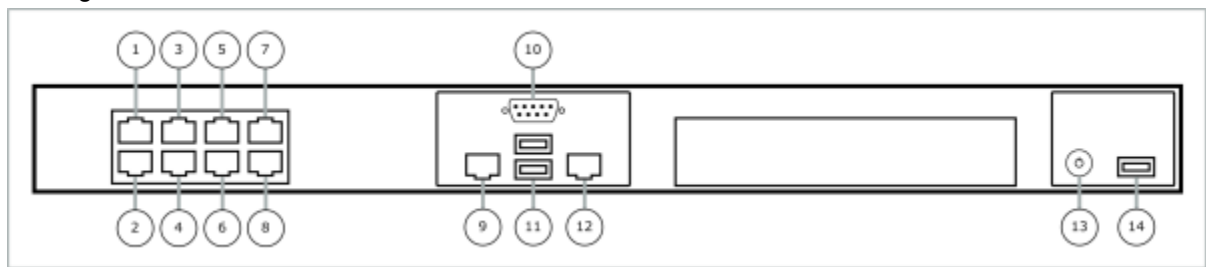


Figure 2: Model S2008 front panel

Number	Description
1	Network port 1-0
2	Network port 1-1
3	Network port 1-2
4	Network port 1-3
5	Network port 1-4
6	Network port 1-5
7	Network port 1-6
8	Network port 1-7
9	Dedicated management port
10	VGA port
11	USB ports
12	RS-232 serial port
13	Power button
14	USB port

Model S3008

This figure shows the attributes of model S3008.

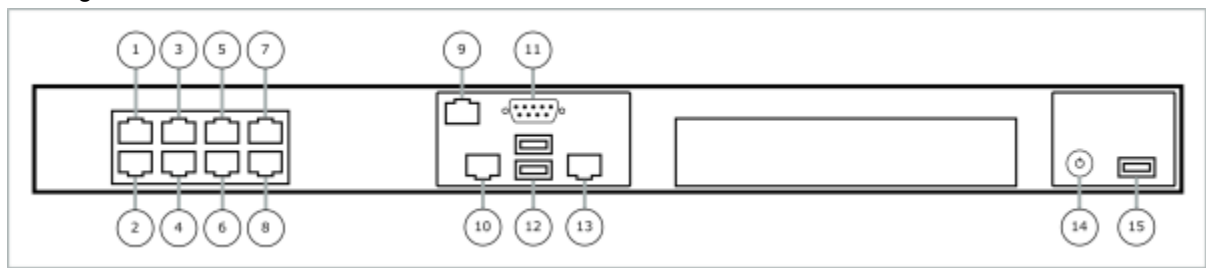


Figure 3: Model S3008 front panel

Number	Description
1	Network port 1-0

Number	Description
2	Network port 1-1
3	Network port 1-2
4	Network port 1-3
5	Network port 1-4
6	Network port 1-5
7	Network port 1-6
8	Network port 1-7
9	Remote Management Module port
10	Dedicated management port mgr1
11	VGA port
12	USB ports
13	RS-232 serial port
14	Power button
15	USB port

Supported software

Several Sidewinder software versions are supported.

Model S1104

- **Version 7** — 7.0.1.02.HW02 rev. B and later
- **Version 8** — 8.1.1 and later

Models S2008 and S3008

- **Version 7** — 7.0.1.02.HW03 and later
- **Version 8** — 8.1.1 and later

Network ports and NICs

Sidewinder models S1104, S2008, and S3008 have multiple 1 gigabit RJ45 copper network ports, which are physically labeled. These port labels correspond to Sidewinder NIC (network interface card) names for software version 8.1.1 and later.

In version 8.1.1 and later, software NIC names for network ports are derived from a combination of two factors:

- Ethernet port number (labeled on the network module)
- Network module bay number where the Ethernet port is installed (“1” is used for appliances that do not have network module bays)

This information is combined to create the NIC name as follows:

```
<module bay number>-<Ethernet port number>
```

The following table shows the NIC names for version 8.1.1 and later.

Table 2: NIC names in version 8.1.1

Model Software	NIC names
S1104	1-0 to 1-3
S2008	1-0 to 1-7
S3008	1-0 to 1-7

Types of management ports

There are two types of management ports: dedicated management ports and Remote Management Module ports.

Dedicated management ports

Models S2008 and S3008 include a single 10/100/1000 RJ45 copper dedicated management port, which provides additional network connection options for management traffic.



Note: Model S1104 does not include a dedicated management port.

Supported types of network traffic

Dedicated management ports can be used for several types of network traffic.

- Firewall administration, including:
 - Sidewinder Admin Console
 - Forcepoint™ Sidewinder®
 - Secure Shell
- Streaming log data to remote servers, including:
 - Syslog server
- High Availability heartbeat



Note: Conventional network ports can also be used for these types of traffic.

Identifying the management port

For Sidewinder version 8.1.1 and later, the management port NIC is named mgr1.

Remote Management Module port

Model S3008 includes a single 10/100 RJ45 copper Remote Management Module port, which provides system management features independent from the Sidewinder operating system.

The Remote Management Module port cannot be used by Sidewinder and the port does not appear in the list of firewall interfaces.



Note: Models S1104 and S2008 do not include Remote Management Module ports.

Features

You can use the Remote Management Module web interface to perform several tasks.

- View system information
- View system health, including:
 - Sensor readings
 - Event log
- Control the appliance remotely using console redirection
- Turn the appliance on or off

eUSB support

Some S2008 or S3008 models contain an integrated eUSB device that allows you to re-image the appliance or run hardware diagnostics without the use of external media.

To determine if your model includes the eUSB device, locate the appliance part number. The part number can be found on your activation certificate, or printed on a label on the appliance cover.

Appliances with the following part numbers contain the eUSB device:

- **S2008** — 610-1653-05 or higher
- **S3008** — 610-1654-05 or higher

Related tasks

[Update the eUSB device](#) on page 13

You can use the eUSB Flashing Utility to update the versions available on the eUSB device.

Regulatory information

In compliance with Federal Communications Commission (FCC) regulations, this section provides information about the appliance models and contact information.

Model information

The regulatory information applies to Sidewinder S1104, S2008, and S3008 models.

Table 3: Regulatory model information

Sidewinder model	Regulatory model
S1104	S1104
S2008	S2008/S3008
S3008	S2008/S3008

Contact information

Use the following information to contact us.

Forcepoint LLC

10900-A Stonelake Blvd
Quarry Oaks 1, Ste 350
Austin TX 78759
USA
+1-800-723-1166

Configuring the management ports

You need to enable the dedicated management ports for models S2008 and S3008, and Remote Management Module for model S3008 to manage network traffic.

Configure a dedicated management port

The dedicated management ports included with models S2008 and S3008 are disabled by default. To configure and enable a dedicated management port, perform these steps.

1. Create a zone for the management network.
2. Configure the NIC that corresponds to the dedicated management port and assign it to the management zone.
3. Create or modify access control rules to allow the appropriate management traffic.

Related concepts

[Dedicated management ports](#) on page 7

Models S2008 and S3008 include a single 10/100/1000 RJ45 copper dedicated management port, which provides additional network connection options for management traffic.

Configure the Remote Management Module

The Remote Management Module included with model S3008 is disabled by default. Perform these tasks to configure and use the Remote Management Module.

If the appliance is deployed in a production environment, schedule a maintenance interval to enable the Remote Management Module.

Related concepts

[Remote Management Module port](#) on page 7

Model S3008 includes a single 10/100 RJ45 copper Remote Management Module port, which provides system management features independent from the Sidewinder operating system.

Connect the Remote Management Module port

To use the Remote Management Module, connect the Remote Management Module port to a network.



CAUTION: We recommend connecting the Remote Management Module port to a dedicated management network that meets the security needs of your organization.

Enable the Remote Management Module

You can configure and enable the Remote Management Module.

1. Enter the appliance BIOS menu.
 1. Restart or turn on the appliance.
 2. Press **F2** to enter the BIOS menu.
 3. Navigate to the **Server Management** tab.

4. Select **BMC LAN Configuration**.
2. Configure the following options:
 - IP address
 - Subnet mask
 - Gateway IP address
3. In the **User configuration** area, specify at least one user that will be allowed to access the appliance from a remote host.
 1. In the **User ID** field, select the user ID that you want to configure.

Tip: The appliance has five user IDs for user information: anonymous, root, User3, User4, and User5. Each user ID can be enabled or disabled and assigned a privilege.
 2. Configure the following options:
 - Privilege
 - User name
 - User password
 3. In the **User status** field, select **Enable** to activate the user ID.
4. Press **F10** to exit the BIOS and save the changes.

Connect to the Remote Management Module web interface

Perform these steps to connect to the Remote Management Module web interface from a remote computer.

1. In a web browser, go to `https://<IP of Remote Management Module>`. The first time you connect, accept the SSL certificate.
2. Specify a user name and password, then click **Login**. The homepage appears.
3. Click the tab that corresponds to the task you want to perform.



Tip: For option descriptions, click **Help**.

Table 4: Web interface tabs

Tab	Task
System Information	View appliance information
Server Health	<ul style="list-style-type: none">• View sensor readings• View the event log
Configuration	<ul style="list-style-type: none">• Configure Remote Management Module network settings• Manage Remote Management Module users• Upload a new SSL certificate• Configure LDAP (Lightweight Directory Access Protocol)
Remote Control	<ul style="list-style-type: none">• Access the appliance console• Turn the appliance on or off



CAUTION: When modifying network settings for the Remote Management Module on the Configuration tab, select **Intel RMM3** from the **LAN Channel** drop-down list. Do not configure the Baseboard Mgmt LAN channel.

Re-imaging an appliance

Serious issues might require you to re-install or re-image your Sidewinder appliance.

- If the appliance is deployed in a production environment, schedule a maintenance interval to perform the re-imaging procedure.
- If you want to preserve the firewall configuration, create a configuration backup and save it off the appliance.

For instructions on creating a configuration backup, refer to the *Forcepoint Sidewinder Product Guide*.

- If your appliance does not have an integrated eUSB device, locate the installation USB drive that was included with the appliance. If you cannot find the USB drive, download the USB image and write it to a USB drive.
- All S1104, S2008, and S3008 models can be re-imaged using an installation USB drive.
- Some S2008 and S3008 models contain an integrated eUSB device that allows the appliances to be re-imaged without external media.

Update the eUSB device

You can use the eUSB Flashing Utility to update the versions available on the eUSB device.

Verify that your appliance has an integrated eUSB device.

Select the type of media for the eUSB Flashing Utility image.

- USB — The USB drive must be 2 GB or larger.
- DVD — S models do not have a DVD drive — an external USB DVD drive is needed.



Note: We recommend using USB media.

The versions that shipped with your appliance might not be the most current, or you might have different eUSB versions throughout your network. With the eUSB Flashing Utility, you can update the versions available for your appliances.



Note: Firewall S1104 models do not have an eUSB device.

1. Download the update tool.
 1. Go to <http://secure.mcafee.com/apps/downloads/my-products/login.aspx>.
 2. Enter your grant number, then navigate to the appropriate product and version.
 3. Select the eUSB Flashing Utility file and write the image to a DVD or USB drive.

- USB drive

1. Download the USB .img image.
2. Write the image to the USB drive.



Note: See KnowledgeBase article [KB69115](#) for instructions.

- DVD

1. Download the .iso image.
2. From your local hard drive, right-click the .iso image file and select **Burn disk image**.
3. When prompted, insert a blank DVD disc.

2. Restart the appliance to the media you created.

1. Insert the media into the appliance.
2. Restart the appliance.

3. When **Press <F2> to enter SETUP, <F6> Boot Menu, <F12> for Network Boot** appears on the screen, press **F6**.
4. Select the drive that the media is in.
5. When prompted **Would you like to update your eUSB image?**, select **Yes**.
The eUSB Flashing Utility opens and searches for the eUSB device.
6. When the device is found, select **Yes** to proceed.



Note: If the eUSB device cannot be found, the system shows an error message and prompts you to restart.

3. When complete, you are prompted to restart; select **Yes**.
4. After the system restarts, remove the media.

Re-image the appliance using the eUSB device

Use the integrated eUSB device to re-image the appliance.

Determine if your model contains an eUSB device. See *eUSB support* in this guide for more information.

1. Connect your appliance to a monitor and keyboard or serial console.
2. Restart or turn on the appliance.
3. During startup, press **F6** to access the one-time boot settings.
4. From the list of boot options, select **McAfee Firewall**.
The appliance boots from the integrated installation media and displays standard boot-up information.
5. At the welcome menu, select the appropriate option.

- If you are using a mouse and keyboard, type **1**, then press **Enter**.
- If you are using a serial console, type **4**, then press **Enter**.

The appliance continues starting.

6. When prompted, choose the version you want to install.
 1. Use the arrow keys and spacebar to select the version.
 2. Select **OK**, then press **Enter**.

Installation begins. When the operation completes, a menu appears.

7. On the post-installation menu, select **Reboot**, then press **Enter**.
The appliance restarts and boots the Sidewinder version you installed.
8. Provide the initial configuration using one of these methods:
 - Insert a USB drive containing a disaster recovery backup into one of the appliance USB ports.
 - Use the Quick Start Wizard on a Windows-based computer to create an initial configuration file and save it to a USB drive, then insert the USB drive into the appliance.
 - Complete the text-based Quick Start Wizard at the appliance terminal.

Related concepts

[eUSB support](#) on page 8

Some S2008 or S3008 models contain an integrated eUSB device that allows you to re-image the appliance or run hardware diagnostics without the use of external media.

Download the USB image and write it to a USB drive

If you do not have the installation USB drive that was included with the appliance, perform this procedure to create a new one.

1. Download the USB image.
 1. In a web browser, navigate to <http://www.mcafee.com/us/downloads/downloads.aspx>.
 2. Provide your grant number, then navigate to the appropriate product and version.
 3. Download the USB image (.zip) file.



Note: Make sure the version you download is compatible with the appliance.

2. Write the image to a USB drive. Refer to KnowledgeBase article KB69115 for instructions.

Related concepts

[Supported software](#) on page 6

Several Sidewinder software versions are supported.

Re-image the appliance using a USB drive

If your appliance does not have an eUSB device, you must use a USB drive to re-image.



CAUTION: Re-imaging an appliance removes all configuration and log data.

1. Boot the appliance from the physical installation media that you created.
 - If the appliance is on, insert the USB drive and restart the appliance.
 - If the appliance is off, insert the USB drive and turn on the appliance.

The appliance starts and displays standard boot-up information.

2. When the appliance starts, enter the boot menu.
 - For S1104 models, press **F7**.
 - For S2008 and S3008 models, press **F6**.
3. At the boot menu, select the installation USB drive.



Note: The name of the drive depends on the USB drive used.

The appliance boots from the USB drive.

4. At the **Welcome to Forcepoint Sidewinder** menu, select the appropriate option.
 - If you are using a mouse and keyboard, press **Enter** to accept the default.
 - If you intend to use a serial console, type **4** and press **Enter**.
5. When the installation complete message appears, remove the installation media from the appliance.
6. Press **R** to restart the appliance, then press **Enter**.

The appliance restarts and boots the Sidewinder version you installed.
7. Provide the initial configuration using one of these methods:

- Insert a USB drive containing a disaster recovery backup into one of the appliance USB ports.
- Use the Quick Start Wizard on a Windows-based computer to create an initial configuration file and save it to a USB drive, then insert the USB drive into the appliance.
- Complete the text-based Quick Start Wizard at the appliance terminal.

Diagnosing hardware problems

Sidewinder models S2008 and S3008 contain tools you can use to diagnose hardware problems.

Run hardware diagnostics

The diagnostics utility is independent of the appliance operating system, so the appliance must be restarted to run the diagnostics.

- Determine if your model contains an eUSB device.
Some S2008 and S3008 models contain an integrated eUSB device that includes a hardware diagnostic utility. See *eUSB support* in this guide for more information.
- If the appliance is deployed in a production environment, schedule a maintenance interval to run hardware diagnostics.
- Make sure your appliance is not connected to a network.



Note: If you want to run a comprehensive test on the NIC ports, use a crossover cable to connect any network port to another port in the same system.

Use these high-level steps to run diagnostics on your appliance.



Note: For complete instructions, including how to create an IDT CD or USB, see the *Intel Diagnostics Tool for McAfee Appliances Instructions*.

1. Determine the IDT media source — eUSB, CD, or USB drive.



CAUTION: If you use the eUSB IDT, you will not be able to save the test logs.

2. Prepare your appliance.
If external media is used, insert the CD or USB drive during this step.
3. Start the diagnostic utility.
4. Run the hardware test.
5. [Optional] Run another type of test.
6. Exit the diagnostic utility.
7. [Optional] View the log created by the test with the `edit fsz:\result.log` command.
8. Restart the appliance with the `reset` command.
If external media was used, remove it before restarting.

Related concepts

[eUSB support](#) on page 8

Some S2008 or S3008 models contain an integrated eUSB device that allows you to re-image the appliance or run hardware diagnostics without the use of external media.

View the system event log

You can view the system event log (SEL) by connecting to the Remote Management Module or by using the integrated system event log viewer.



Note: If the Sidewinder IPMI daemon (ipmid) is enabled, system event log events are converted to firewall audit entries and removed from the system event log. If you want to use the system event log to monitor hardware events instead of the firewall audit, disable ipmid by running the command `cf daemon disable agent=ipmid`.

Use the Remote Management Module

To view the system event log from a remote location, use the Remote Management Module.

1. In a web browser, go to `https://<IP of Remote Management Module>`.
2. Specify your credentials and log on.
3. Click the **Server Health** tab.
4. Click **Event Log**.

Use the integrated system event log viewer

If you have local access to the appliance, use the integrated system event log viewer to view the system event log.

1. Connect your appliance to a monitor and keyboard.
2. Restart or turn on the appliance.
3. When the appliance starts, press **F6** to access the one-time boot settings.
4. From the list of boot options, select **Internal EFI Shell**.

The EFI shell starts and a countdown timer appears. When the countdown is complete, the **Intel Diagnostic Tool** menu appears.



CAUTION: Wait for the countdown to finish. Do not press any key.

5. At the `fs0:\>` prompt, run the `sel` command. The system event log viewer appears.



Tip: For instructions on how to use the system event log viewer, select **Help**.

S1104 control panel indicator lights

The control panel of S1104 model has two status indicator lights. The control panel is found on the front of the chassis.

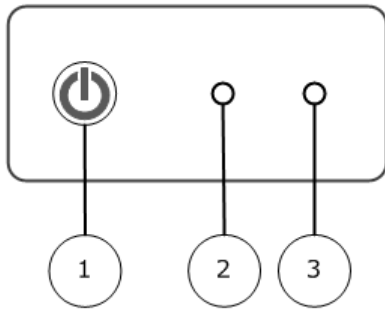


Figure 4: S1104 control panel indicator lights

1. Power button
2. System power
3. Hard drive activity

The following table summarizes the indicator light states and the corresponding hardware component status.

Table 5: S1104 indicator light states

Indicator light	Color	State	Status
System power	Blue	Solid	Power on
	Off	Off	Power off
Disk activity	Amber	Random blink	Hard disk activity in progress
	Off	Off	No hard disk activity

S2008 and S3008 control panel indicator lights

The control panel of S2008 and S3008 models has four status indicator lights. The control panel is found on the front of the chassis.

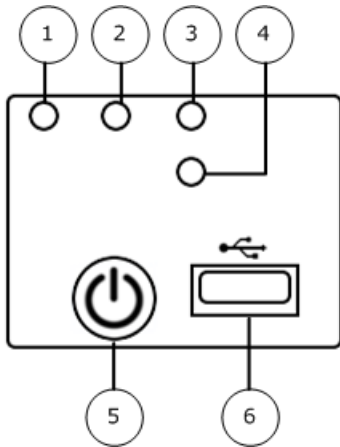


Figure 5: S2008 and S3008 control panel indicator lights

1. NIC 1
2. System power
3. System status
4. Hard drive activity
5. Power button
6. USB port

The following table summarizes the indicator light states and the corresponding hardware component status.






Table 6: S2008 and S3008 indicator light states

Indicator light	Color	State	Status
NIC 1	Green	Solid	NIC link/no access
		Blink	LAN access
System power	Green	Solid	Power on
	Off	Off	Power off
Disk activity	Green	Random blink	Hard disk activity in progress
	Off	Off	No hard disk activity

The following table describes the system status indicator light.

Table 7: S2008 and S3008 system status indicator light

Color	State	Status
Green	Solid	System booted and ready
	Blink	System degraded: <ul style="list-style-type: none">• Non-critical temperature threshold asserted• Non-critical voltage threshold asserted• Non-critical fan threshold asserted

Color	State	Status
		<ul style="list-style-type: none"> Fan redundancy lost, sufficient system cooling maintained <div>  Note: This does not apply to non-redundant systems. </div> <ul style="list-style-type: none"> Power supply predictive failure Power supply redundancy lost <div>  Note: This does not apply to non-redundant systems. </div> <ul style="list-style-type: none"> Correctable errors over a threshold of 10 and migrating to a mirrored DIMM (memory mirroring) <div>  Note: This indicates the appliance no longer has spare DIMMs indicating a redundancy lost condition. The corresponding DIMM indicator light should light up. </div>
Amber	Blink	Non-fatal alarm — System is likely to fail: <ul style="list-style-type: none"> CATERR asserted Critical temperature threshold asserted Critical voltage threshold asserted VRD hot asserted SMI Timeout asserted
	Solid	Fatal alarm — System has failed or shut down: <ul style="list-style-type: none"> CPU missing Thermal Trip asserted Non-recoverable temperature threshold asserted Non-recoverable voltage threshold asserted Power fault/Power Control Failure Fan redundancy lost, insufficient system cooling <div>  Note: This does not apply to non-redundant systems. </div> <ul style="list-style-type: none"> Power supply redundancy lost insufficient system power <div>  Note: This does not apply to non-redundant systems. </div>
Off	Off	System powered off