

# System Management Module 3 overview

The N1380 enclosure management module

Lenovo

## What is the System Management Module 3

The N1380 enclosure includes a System Management Module 3 (SMM3), installed in the rear of the enclosure. The SMM3 provides remote management for both the enclosure and the individual servers installed in the N1380 enclosure. The SMM3 can be accessed through a web browser interface and via Intelligent Platform Management Interface (IPMI) 2.0 commands.

The SMM3 provides the following functions:

- Remote connectivity to XCC controllers in each node in the enclosure
- Node-level reporting and control (for example, node virtual reseal/reset)
- Enclosure power management
- Enclosure thermal management
- Enclosure inventory

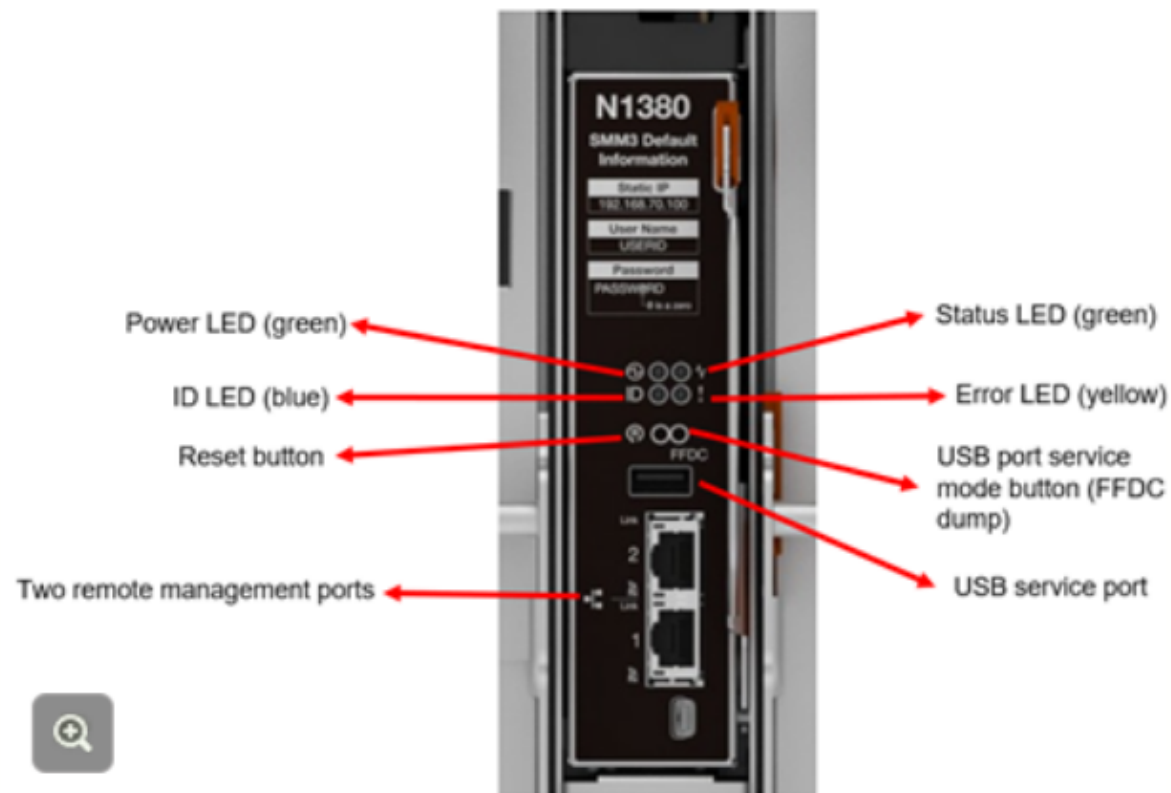


## SMM3 ports and LEDs

The SMM3 has the following ports and LEDs:

- Two RJ45 Gigabit Ethernet ports for remote management access
- USB port and activation button for servicing
- SMM reset button
- System error LED (yellow)
- Identification (ID) LED (blue)
- Status LED (green)
- System power LED (green)

The FFDC dump button and USB service port are used to gather service data in the event of an error. Press this button to collect FFDC logs after inserting a USB storage device into the USB service port. The reset button is used to perform an SMM reset (short press) or to restore the SMM back to factory defaults (press for over four seconds).



## SMM3 management ports

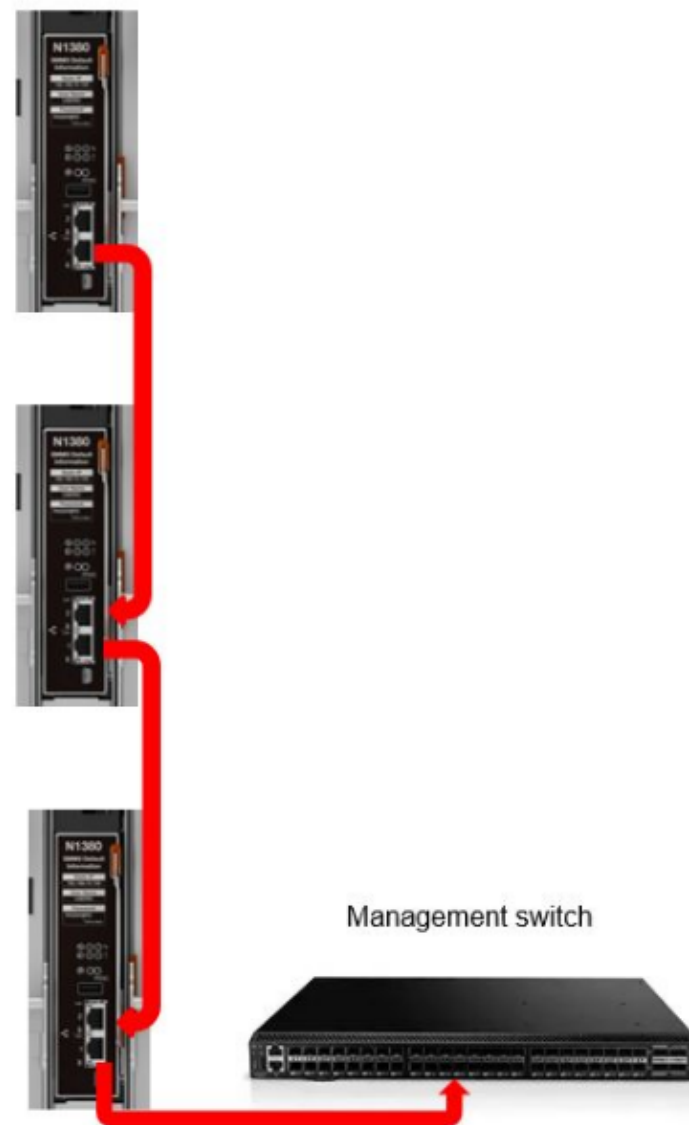
Using the two RJ45 Ethernet ports on each SMM3, users can daisy-chain the Ethernet management connections. This reduces both the number of ports needed by the management switches and the overall cable density needed for systems management.

Up to three enclosures can be connected in a daisy-chain configuration, and all 48 servers in those enclosures can be managed remotely via a single Ethernet connection.

To set this up, connect the SMM in the first enclosure to the management network and to the SMM in the second enclosure. The SMM in the second enclosure should also be connected to the SMM in the third enclosure.

Notes:

- If you are using IEEE 802.1D spanning tree protocol (STP), a maximum of three enclosures can be connected.
- Do not form a loop with the network cabling. The dual-port SMM at the end of the chain should not be connected back to the switch that is connected to the top of the SMM chain.



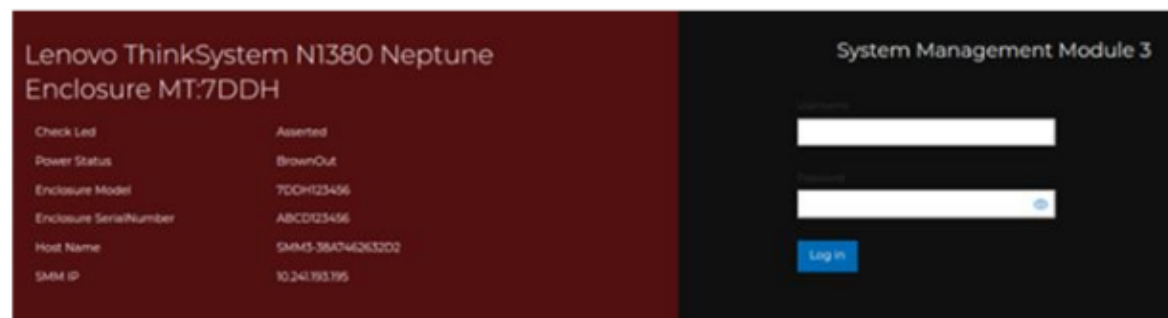


## SMM3 web GUI

To access the SMM3 GUI, open a browser and enter the SMM3 IP address.

- Default SMM3 IP address: 192.168.70.100 (IPv4 enabled)
- Default username: USERID
- Default Password: PASSWORD (the sixth character is a zero)

Users are required to change the password after logging in for the first time.



System Management Module 3

✖ The password is expired and must be changed.

Username  
USERID

New password

Confirm new password

[Go back](#) [Change password](#)

# Comparison of SMM2 and SMM3

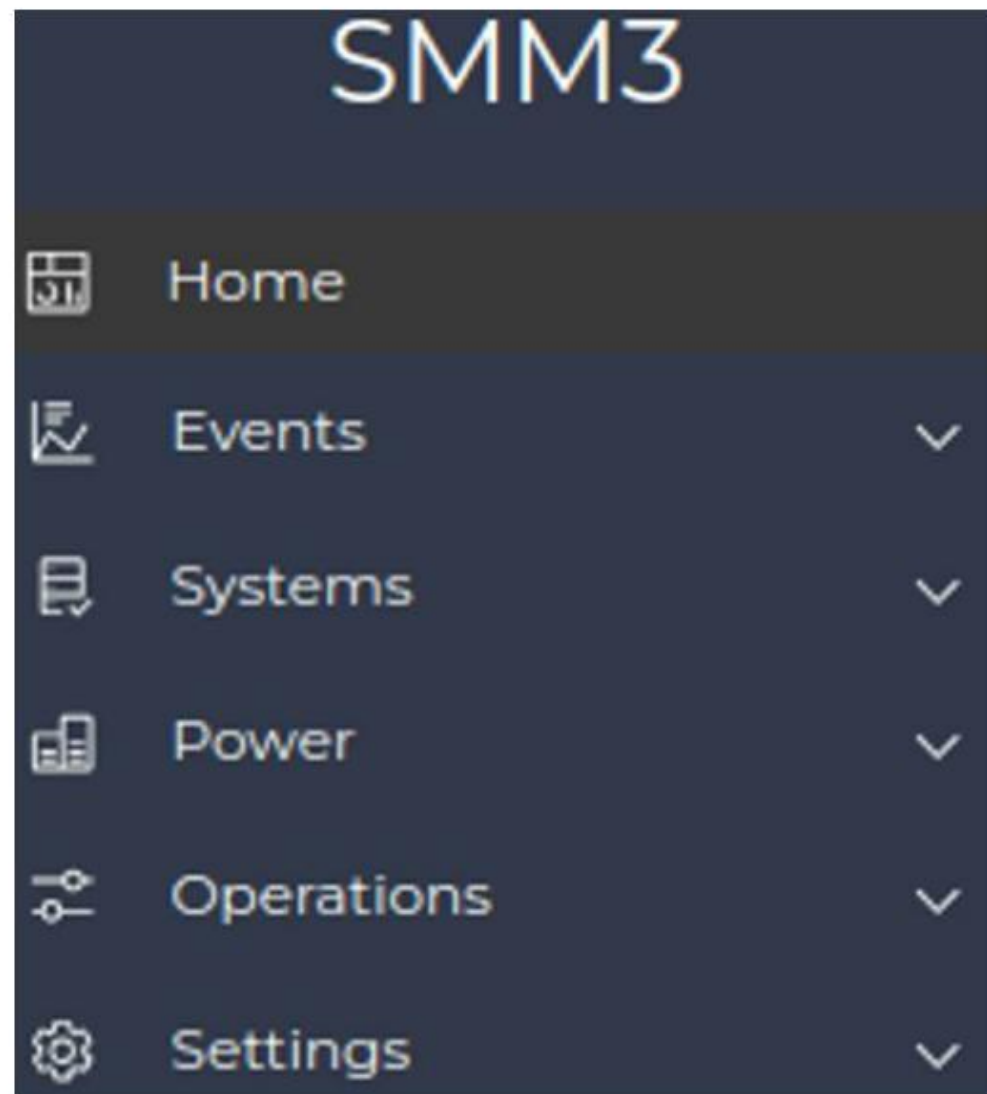
	SMM2	SMM3
System management	Up to 12 nodes, nine PSUs	Up to 32 nodes, four PCSs
Monitoring	Chassis leakage	<ul style="list-style-type: none"><li>• Chassis leakage</li><li>• Node leakage</li><li>• PCS leakage</li><li>• Node PIB power fault</li></ul>
BMC controller	AST2520	AST2620
Daisy chain networking	Yes	Yes
PFR (firmware security)	No	Yes
Power policy / capping	Supports N+1 redundancy with or without OVS (oversubscription)	<ul style="list-style-type: none"><li>• N+0. N+1 (with or without OVS)</li><li>• N+N (with or without OVS)</li></ul>
Cooling	Air	DWC

## SMM3 web GUI functions

There are six function tabs in the SMM3 GUI menu:

- Home
- Events
- Systems
- Power
- Operations
- Settings

Note: A quick introduction to SMM3 functions is included in this section. For more information about the SMM3, refer to the [SMM3 User Guide](#) on Lenovo Docs.



## SMM3 web GUI – Home

The Home page displays overall enclosure status information:

- Enclosure status: Shows hardware health information
- Node status: Shows the number of nodes in the enclosure and how many are powered on
- Power status: Shows system power usage status
- System information: Shows the enclosure product name, machine type, hostname, network information, and firmware version
- Quick actions: Provides enclosure and SMM3 quick actions (Reseat all, Restart)

The screenshot displays the SMM3 web GUI Home page with the following sections:

- Enclosure Status:** Shows a yellow warning icon and the text "Warning". A "View More" link is present.
- Node Status:** Displays "2 nodes populated" and "2 powered On".
- Power Status:** Shows "5.7 % power draw" and "54000 W power capacity".
- System Information:** A table listing the following details:

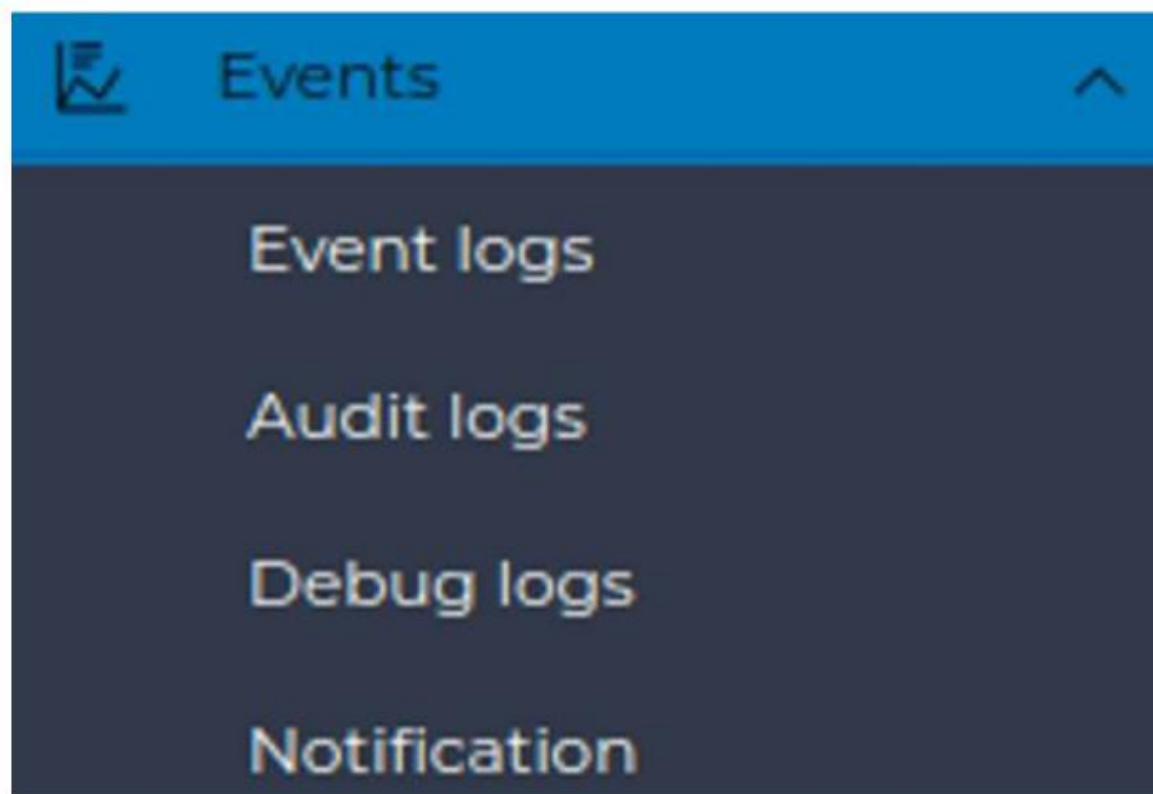
Product Name	Lenovo ThinkSystem N1380 Neptune Enclosure
Machine Type	MT:7DDH
Serial Number	7DDH123456
Serial Number	ABCD123456
Hostname	SMM3-6AE74DEFA74D
IPv4 Static Address	192.168.70.100
IPv4 DHCP Address	10.241.70.100
SMM3 Firmware	Q4SM01A-1.0.00
- Quick Actions:** Includes a "Target" section with radio buttons for "Enclosure" (selected) and "SMM3". Below it is an "Actions" section with a blue button labeled "Reseat ALL".



## SMM3 web GUI – Events

Use the Events tab to check information for the server that you are accessing.

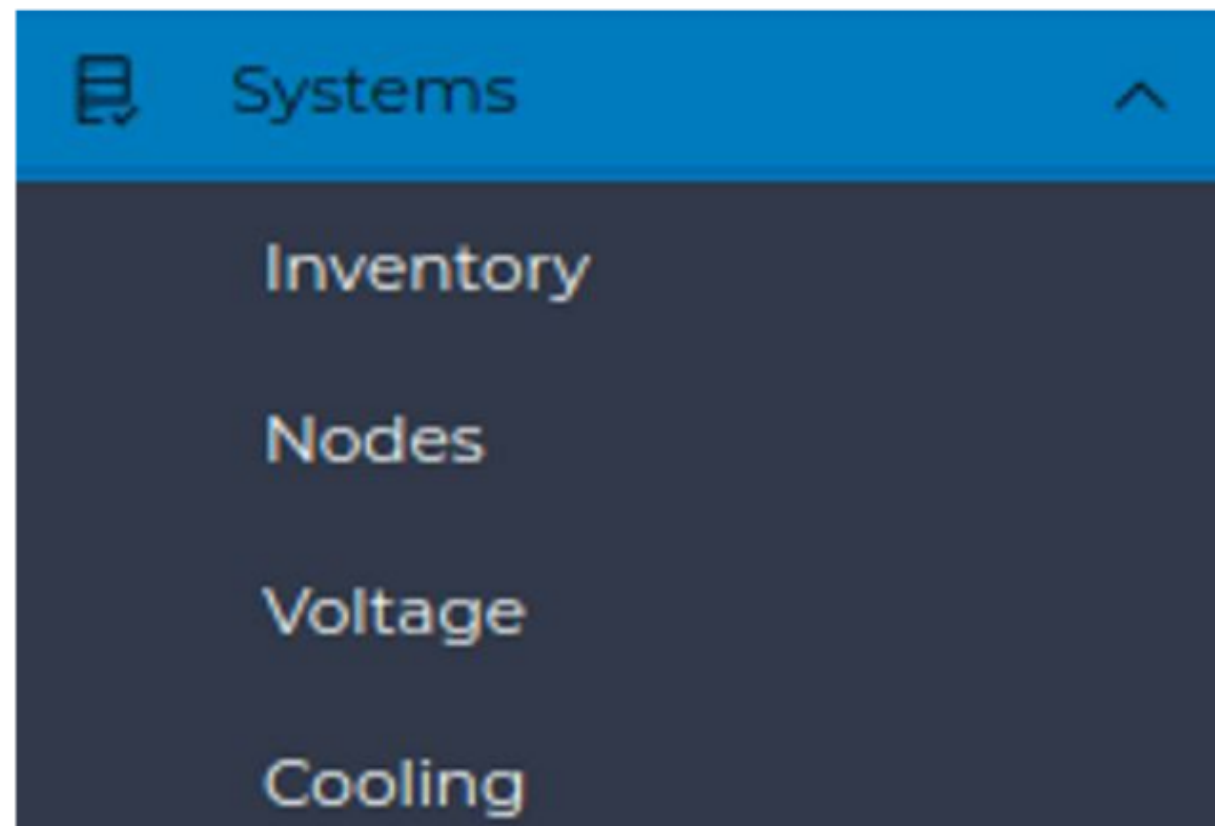
- **Event logs** provides a historical list of all hardware and management events.
- **Audit logs** provides a historical record of user actions, such as logging in to the SMM3, creating a new user, and changing a user password.
- **Debug logs** instantly collects information about events and conditions that might lead up to a failure. It was formerly called FFDC (Fast Failure Data Collection).
- **Notification** contains information that can be used to add and modify email and SNMP trap recipients or update PEF (platform event filters). Configured SMTP and SNMP traps allow users to monitor the enclosure for selected events. SMTP/SNMP trap event types can be set on the PEF page.



## SMM3 web GUI – Systems

The Systems tab contains the following subsections:

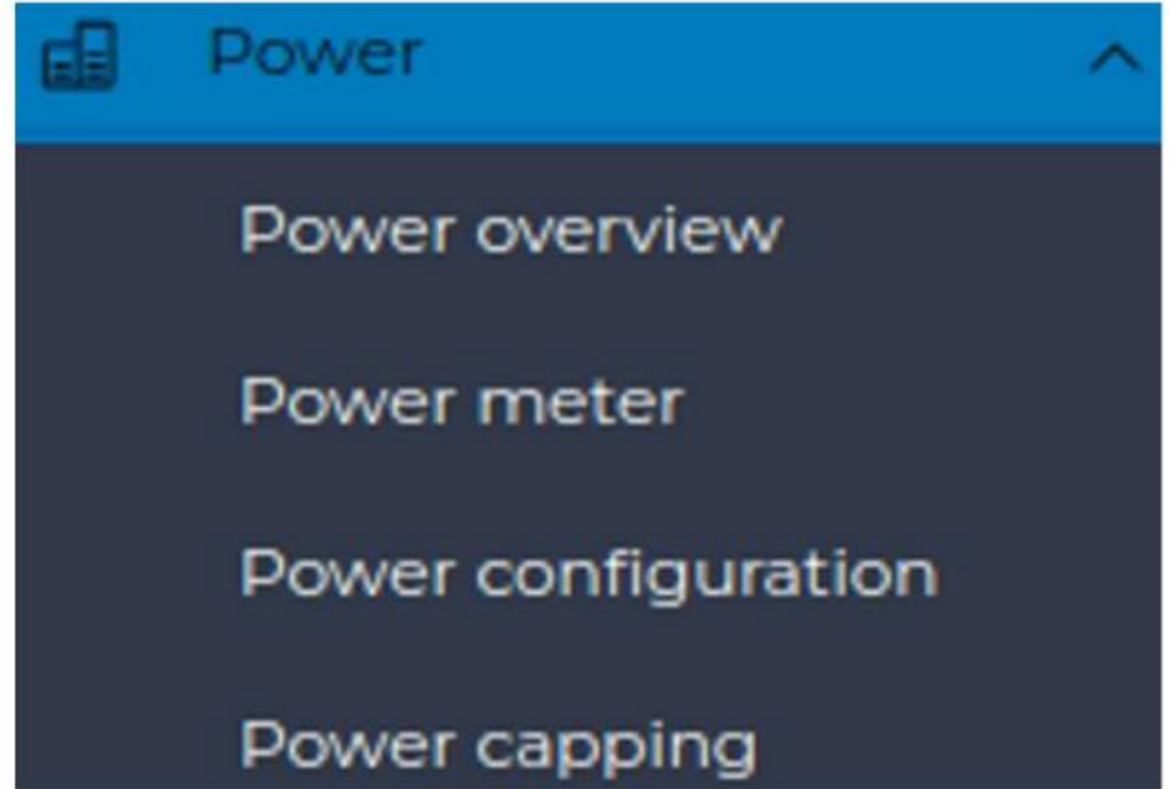
- **Inventory** shows the vital product data for the system.
- **Nodes** contains information that can be used to configure how the server will react when the power is restored after a power loss.
- **Voltage** displays the current voltage readings and status on all voltage sensors supported by the hardware PEF page.
- **Cooling** shows system cooling information and displays all leak detector instances.



## SMM3 web GUI – Power

The Power tab contains the following subsections:

- **Power overview** displays enclosure power consumption, node power consumption, and power consumption of power (power supplies) sub-systems.
- **Power meter** displays power status and information.
- **Power configuration** allows users to set the redundancy mode, oversubscription mode, and zero output for power supplies.
- **Power capping** contains information that can be used to configure the power capping policy.

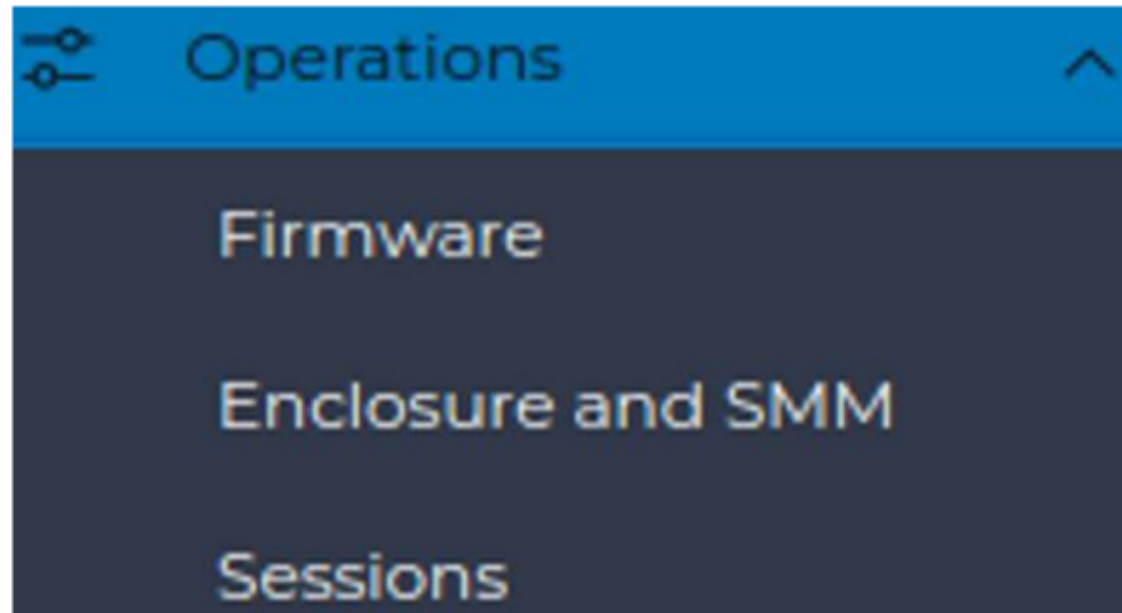




## SMM3 web GUI – Operations

The Operations tab contains the following subsections:

- **Firmware**
  - SMM firmware information
  - SMM and PCS firmware update
- **Enclosure and SMM** provides virtual reseal enclosure and SMM relative control and status information.
- **Session** shows SMM3 session information.





# SMM3 web GUI – Settings

The Settings tab contains the following subsections:

- **User**
  - Account policy settings
  - Add user
  - Edit user
- **Network interface**
  - General setting: Host name, DNS domain name
  - IPv4 configuration
  - IPv6 configuration
  - VLAN configuration
- **Network service**
  - HTTPS certificates
  - Service and port
  - SMTP server
- **Backup and restore**
  - Back up SMM configuration
  - Restore SMM from configuration file
  - Reset SMM to factory default
- **Date and time**
  - This page is used to configure system time

