SSD6540

4-Bay U.2 NVMe RAID Enclosure

User Guide

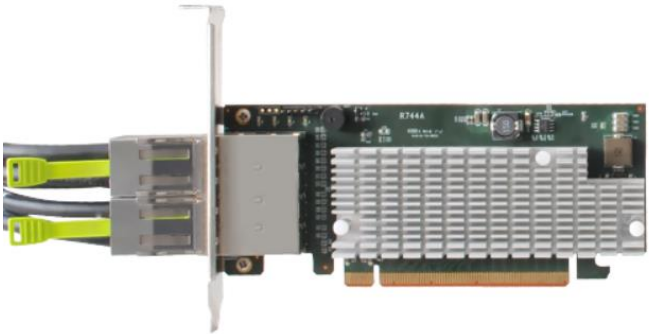
V1.01

Kit Contents

- 1x 4-Bay Tower Enclosure
- 1x PCIe 3.0 x16 RAID Controller
- 4x Drive Trays
- 2x HD mini-SAS cable (1 meter)
- 1x UL Power Cord
- 16x 2.5” SSD mounting screws
- 1x Quick Installation Guide

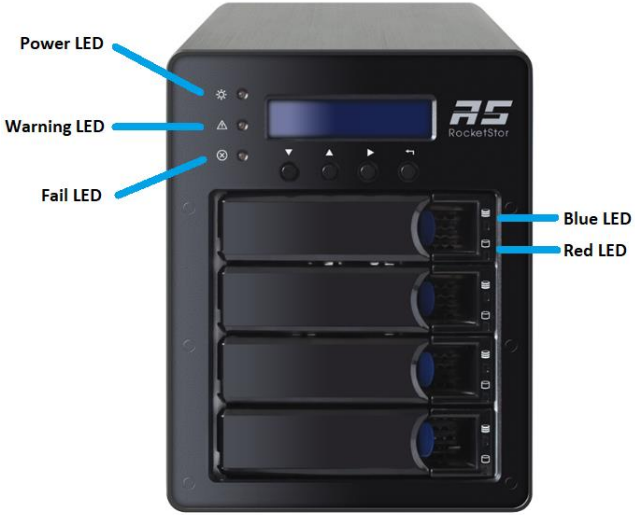
SSD6540 Hardware

Controller Card



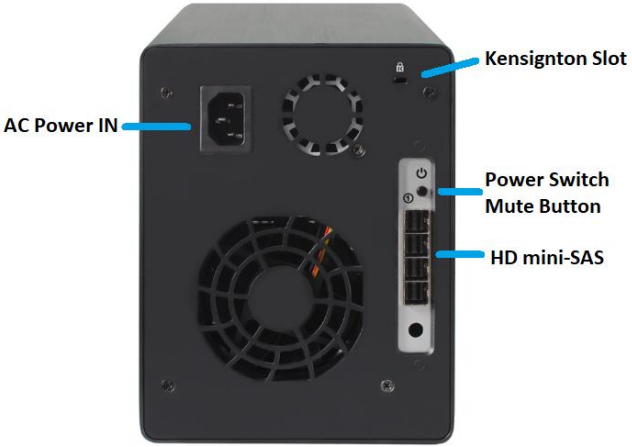
Back Port: SFF-8644

Panel Layout-Front View



Disk Present LED:	Solid Blue
Disk Active LED:	Flash Blue
Disk Fail LED:	Solid Red
Disk Rebuilding LED:	Flash Red
Disk Identify LED:	Flash Blue and Red
Enclosure Power LED:	Solid Blue
Temperature Warning LED:	Solid Yellow
Fan/Temperature Fail LED:	Solid Red

Panel Layout-Rear View



System Requirements

PC Requirements

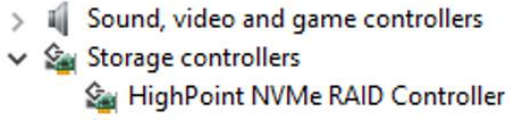
- Mac or PC System with a USB type C Port
- Windows 10 or later
- macOS 10.13 or later
- Linux Kernel 3.3 or later

Enclosure Setup

1. Insert the Controller card into a PCIe x16 slot in your system.
2. Place the SSD6540 enclosure on a level surface and remove each disk tray.
3. Carefully insert the 2.5” disk into each disk tray and secure them with the provided mounting screws.
4. After installing the hard drives, connect the SSD6540 to a power source.
5. With the power cord connected to the power source, turn on the SSD6540 using the power button on the rear panel (click the button to power on the SSD6540).
6. Connected the SSD6540 to the Controller Card with the HD mini-SAS cable.

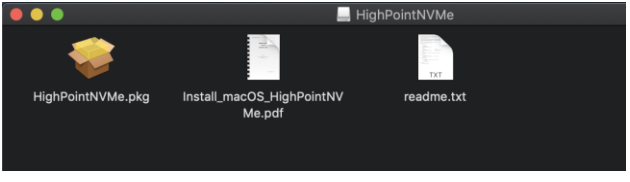
Setting up the SSD6540

1. Driver Installation for Windows
   1) Boot up the Windows operating system.
   2) Download the Windows driver package from the HighPoint website:
      http://highpoint-tech.com/USA_new/series-ssd6540-download.htm
   3) Extract the package and click the setup.exe program to install the driver. The installation program will install the SSD6540 Driver, automatically.
   4) If prompted by Windows, reboot the system after the driver is installed to complete installation.
   5) After reboot the Windows, open **Device Manager**. A HighPoint NVMe RAID Controller entry should appear under **Storage Controllers**



2. Driver Installation for macOS
   1) Download the Mac driver package from the HighPoint website:
      http://highpoint-tech.com/USA_new/series-ssd6540-download.htm
   2) Once downloaded, locate the folder you downloaded the driver to and double click on the file named “HighPointNVMe”

   3) The file will be mounted onto the operating system, click on HighPointNVMe.pkg located on the mounted drive.



   4) Follow the on-screen instructions to continue the installation.
   5) Reboot the computer when finished.
3. Driver Installation for Linux
   1) Please download the Linux Software Package from the HighPoint Website:
      http://highpoint-tech.com/USA_new/series-ssd6540-download.htm
   2) Please follow the Linux Installation guide included with the software package to install and setup the SSD6540.
4. Install the RocketStor Management software.

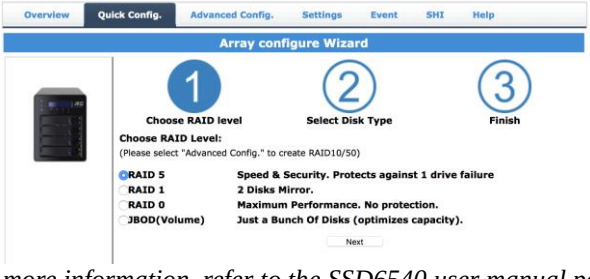
1) Download the RocketStor Management Software (WebGUI) from HighPoint Website:
   http://highpoint-tech.com/USA_new/series-ssd6540-download.htm
2) Extract the package and double Click the Installation program to start installing the WebGUI
3) Follow the on-screen instructions to complete the installation procedure.

5. Quickly Setting up a RAID Array

An array is a collection of physical disks that will be seen as one virtual drive by your Operating System (OS).To create an array: *(You will need at least 1 NVMe connected to for the WebGUI to connect to the unit)*

1) Log into the WebGUI.
2) Click **Quick Config. > Create Array** to go to the array configuration page and follow the steps prompted on the page

Warning: *Using the WebGUI to create RAID arrays will destroy all pre-existing data on the selected disks. Make sure to backup any important data before using these disks to create arrays.*



(For more information, refer to the SSD6540 user manual posted online)

Using the HighPoint NVMe Manager

1. Starting the HighPoint NVMe Manager

Double click the Desktop ICON to start the Web browser. It will automatically log-in to the HighPoint NVMe Manager using the default password.

The password can be set after the first log-in. To change the password, select **Setting**>**Security** from the menu bar (see page 15 for more information).

2. Verify the SSD6540 Status

The **Manage** Tab will display the status of the installed SSD6540. The Virtual Disk is listed under **Logic Device Information**. The individual NVMe SSDs are listed under **Physical Device Information.**

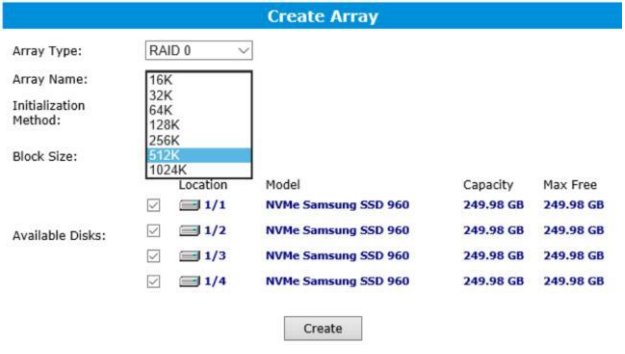
3. Manage the RAID disk

The SSD6540 only supports one RAID disk. If you need to add new NVMe SSD, you must first delete the existing RAID disk, and then re-create a new RAID disk using all of the NVMe SSDs.

To create a new RAID disk:

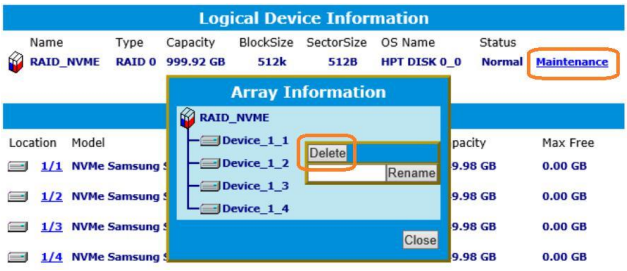
1) Click the Create Array link from the Manage page:

2) Review the array settings and confirm RAID creation.
The SSD6540 supports variable RAID Block Sizes from 16K to 1024K. You may adjust the RAID Block size from the Create Array page. Click the Create Button to create the RAID disk.



To delete an existing RAID disk:

Under Logical Device Information, click the **Maintenance** link located to the right of the Status column. Click the **Delete** button from the pop-up **Array Information** Window:



Warning:
Deleting the RAID disk will destroy all data on the existing RAID array. Please make sure to back up important data before proceeding.

Rename a RAID disk:

The NVMe Manager will automatically name a RAID disk as **RAID_NVME**. It will display the disk name under the system device list. You may rename the RAID disk at any time, by clicking Maintenance and accessing the Array Information window.

4. Product Information and Settings

The **Setting** page includes **Product Information**, **Email notification** and **Security** settings.

Product Information:

This section reports the SSD6540's PCI Bus information and PCIe Link status.

Email Notification:

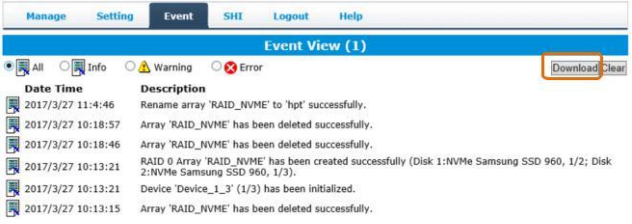
This feature allows you to configure email notification. You can instruct NVMe Manager to send all, or specific Event Log notifications to an Email address of your choice.

Security:

This option allows you to set the NVMe Manager's Log-in port number and Password.

5. Event log

All NVMe Manager operations and disk status updates will be recorded to the Event log. The Event log can be downloaded and saved to a file by clicking the Download button.

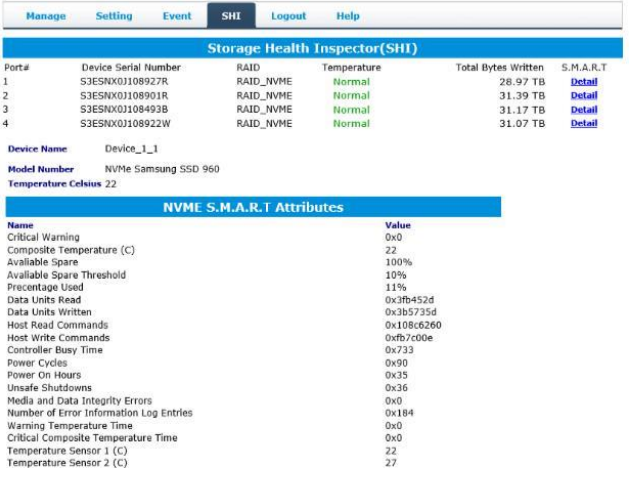


The **Clear** button can be used to delete all entries and reset the event log.

Warning:
We recommend downloading and saving a copy of the current Event Log before using the Clear option.

6. SHI (Storage Health Inspector)

The **SHI** page will display S.M.A.R.T. data for each individual NVMe SSD. Click the **Detail** link to the right of each SSD to view the corresponding S.M.A.R.T. attributes. The SSD's TBW (Total Bytes Written) information may help you review and track the SSD's life cycle.



Customer Support

If you encounter any problems while utilizing the SSD6540, or have any questions about this or any other HighPoint Technologies, Inc. product, feel free to contact our Customer Support Department or check our FAQ for more information.

Web Support: http://www.highpoint-tech.com/websupport/

HighPoint Technologies, Inc. websites:
http://www.highpoint-tech.com