H+3

Falcon 4205

Quick Installation Guide

Falcon 4205 Default Settings:

IP Address:	169.254.100.100
Gateway:	0.0.0.0
Administrator Username:	admin
Administrator Password:	admin

Dear Users

Thank you for choosing our product-Falcon 4205.

The excellent quality and performance makes our products superior in the like product. For you to have the good understanding to Falcon 4205, please read the installation guide and user manual, and operate according to the suggested steps for each feature.

If you have any questions when using our machine, please feel free to contact us. We are more than happy to serve you constantly.
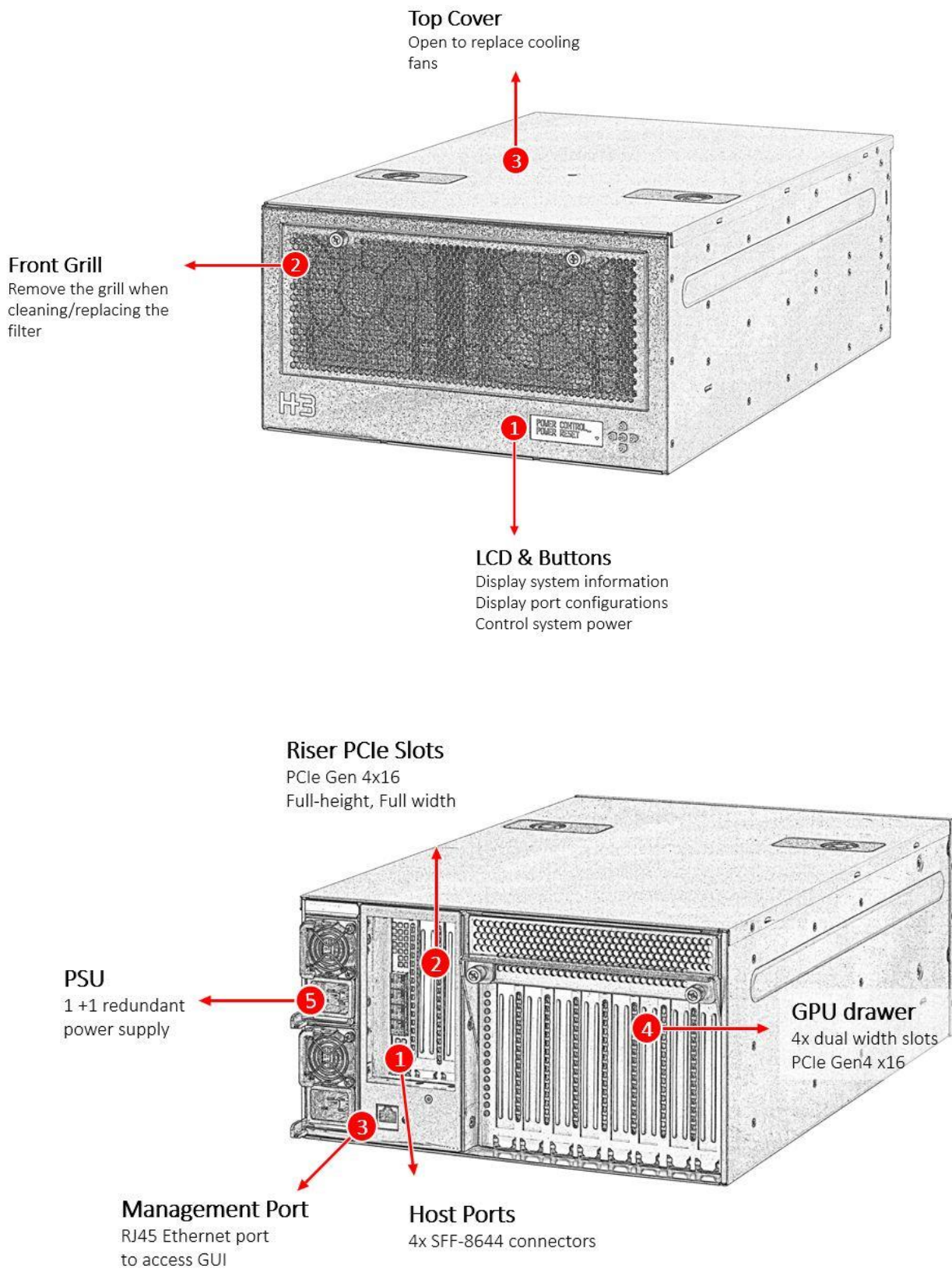
Technical Support: support@h3platform.com
FAQ: https://www.h3platform.com/

H3 Platform Inc. mainly researches and develops PCIe switch-based technology and solutions.

---- H3 Platform Inc.

Contents

Chassis Overview

Top Cover
Open to replace cooling fans

Front Grill
Remove the grill when cleaning/replacing the filter

LCD & Buttons
Display system information
Display port configurations
Control system power

Riser PCIe Slots
PCIe Gen 4x16
Full-height, Full width

PSU
1 +1 redundant power supply

GPU drawer
4x dual width slots
PCIe Gen4 x16

Management Port
RJ45 Ethernet port to access GUI

Host Ports
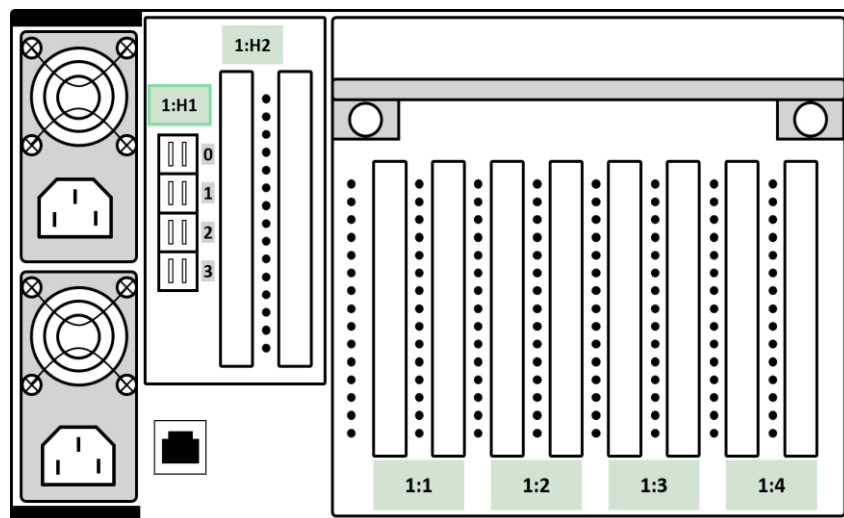4x SFF-8644 connectors

PCIe Port Number

Please refer to the image below to find the physical PCIe slots that is corresponding to the port numbers displayed on the GUI.

E.g.

The device installed on the slot 1:1 will be shown on GUI as "1:1 – [device name]".
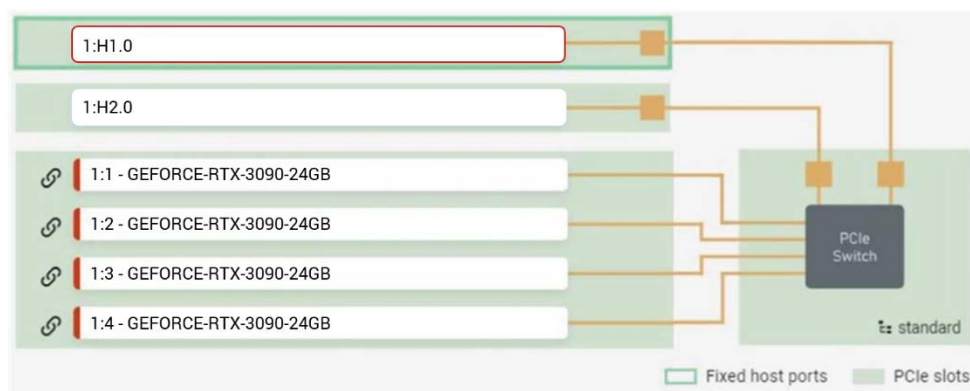
Chassis rear view

Caution:

1:H2 is the riser PCIe slot. Only the slot on the left side (immediately next to the host port) is available. Any devices installed on the ride side will not be recognized by the system.
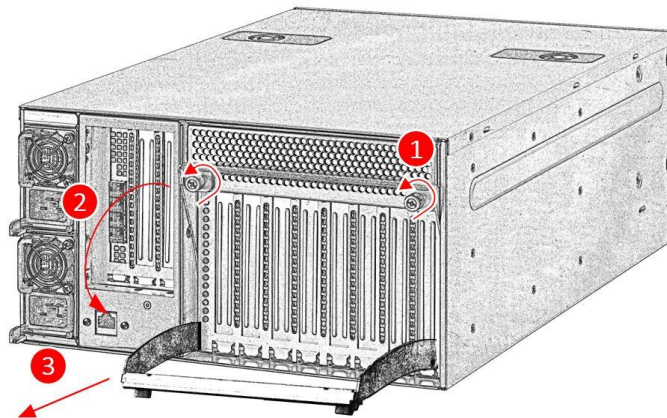
GUI view

Device name may vary
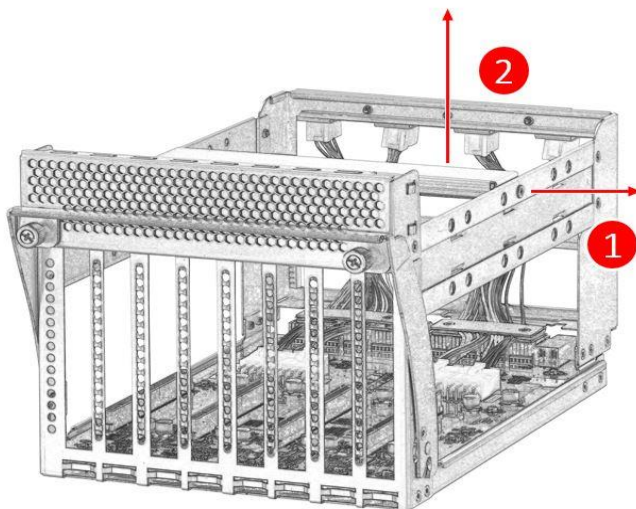
GPU Installation

1. Pull out the drawer

1. Loosen the hand screws.
2. Pull the handle all the way down.
3. Pull the drawer out.

2. Remove the stabilization plate

1. Unscrew the stabilization plate (both sides).
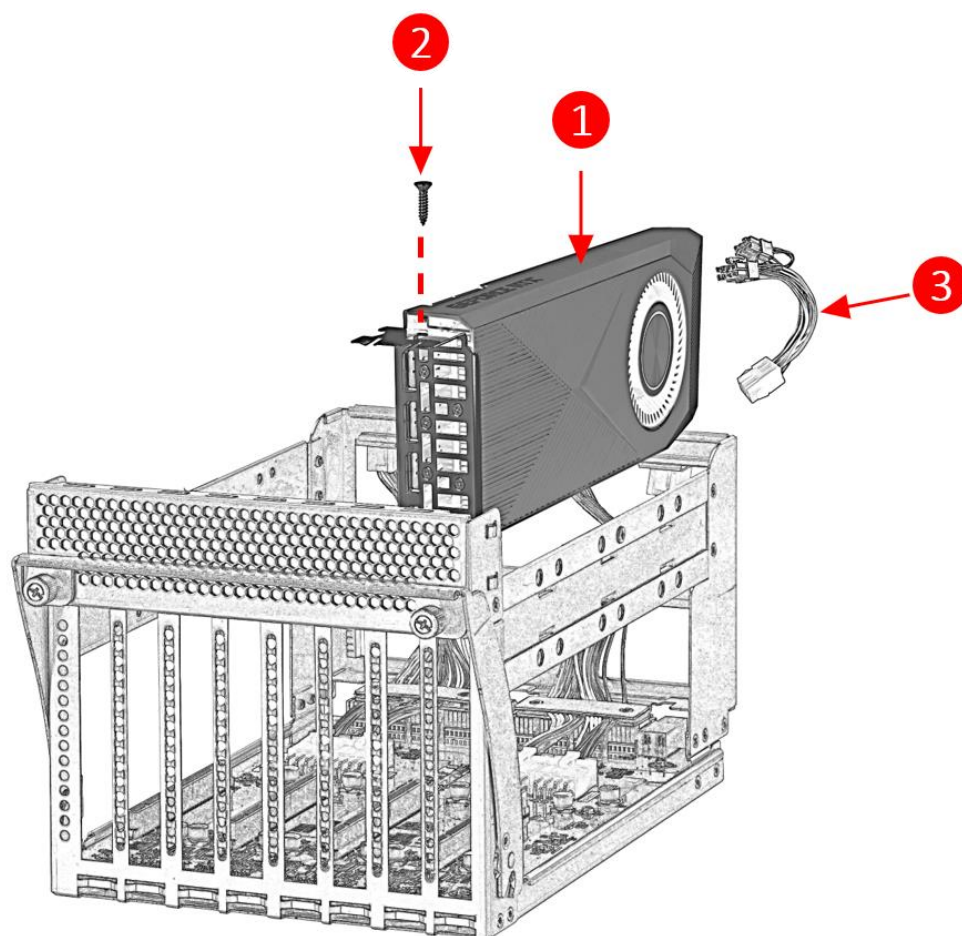2. Lift the plate up to remove.

3. Install GPU

1. Plug the GPU to the PCIe slot.
2. Screw the bracket to hold the GPU in place.
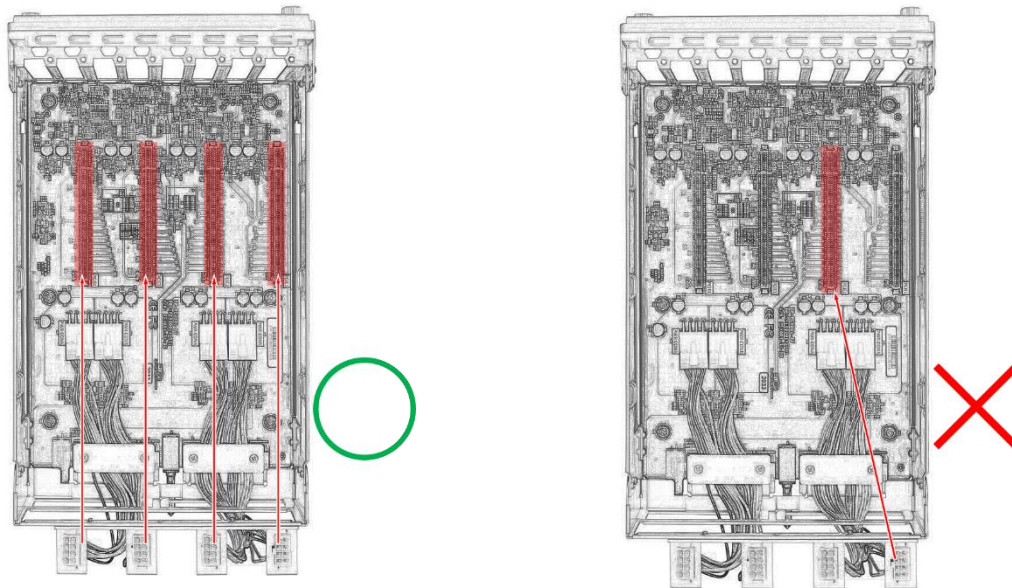3. Connect the PCIe power cable to the GPU.

Caution:

The slots are dual width. Oversized devices may not fit.

Use the suitable power cable for your GPU model.
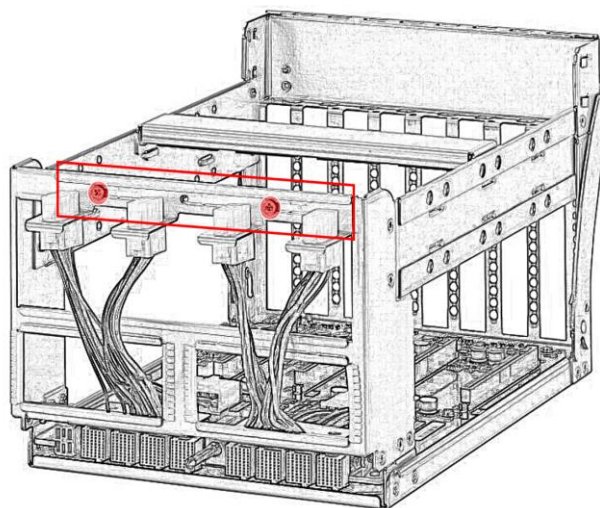
The power connectors are PCIe slot specific.

Please do not cross connect power cables to the devices on other PCIe slots.

The position of the power connector holder is adjustable.

Adjust the position of the power connectors for smooth GPU installation.

1. Loosen the screws.
2. Move the holders to desired position.
3. Tighten the screws to hold it in position.

4. Put the stabilization plate back

1. Place the stabilization plate back.
2. Screws on both sides to hold the plate in place.

There are three positions available for the stabilization plate, pick the ones that would not block the power connectors of your GPU.
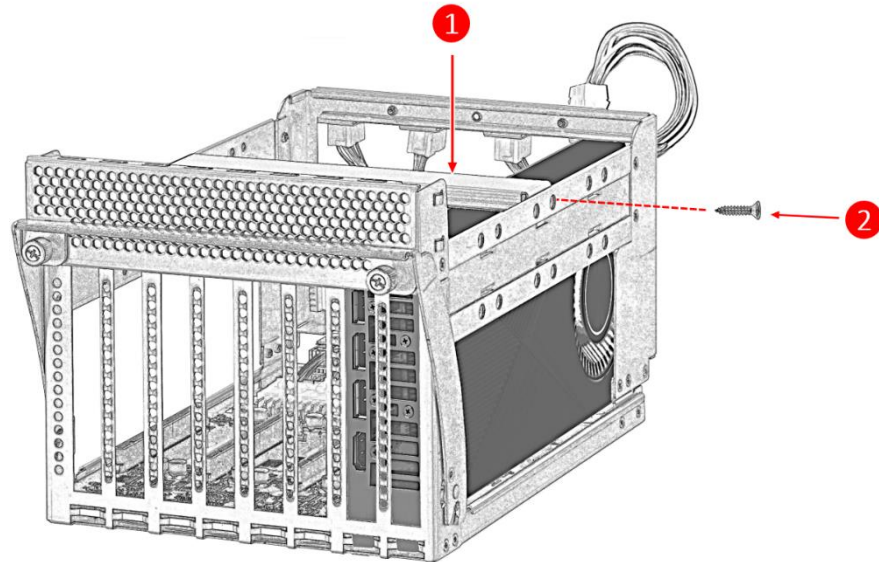
5. Insert the drawer back to the chassis

1. Push the drawer all the way into the drawer socket until slight resistance.
2. Lift the handle, the drawer will be pushed into the position.
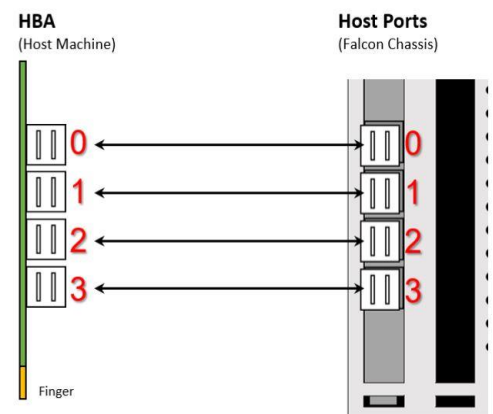3. Tighten the hand screws.
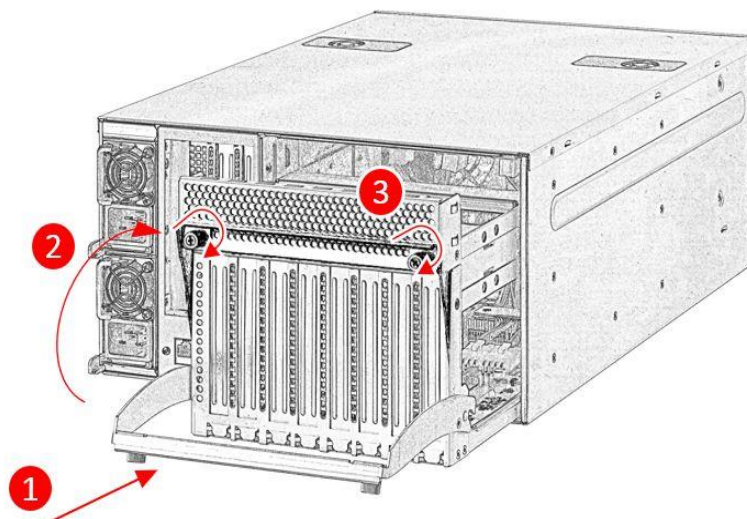
Cabling Guide

1 port x16 lanes

Connect the correspond ports as shown in the right diagram

Host	-	Chassis
0	-	0
1	-	1
2	-	2
3	-	3

The connected host will be recognized as 1:H1 on the GUI

2 ports x8 lanes (Advanced mode)

Connect the corresponding ports as shown in the right diagram

Host 1	-	Chassis
0	-	0
1	-	1

Host 2	-	Chassis
0	-	2
1	-	3

Host 1 will be recognized as 1:H1.0
Host 2 will be recognized as 1:H1.1
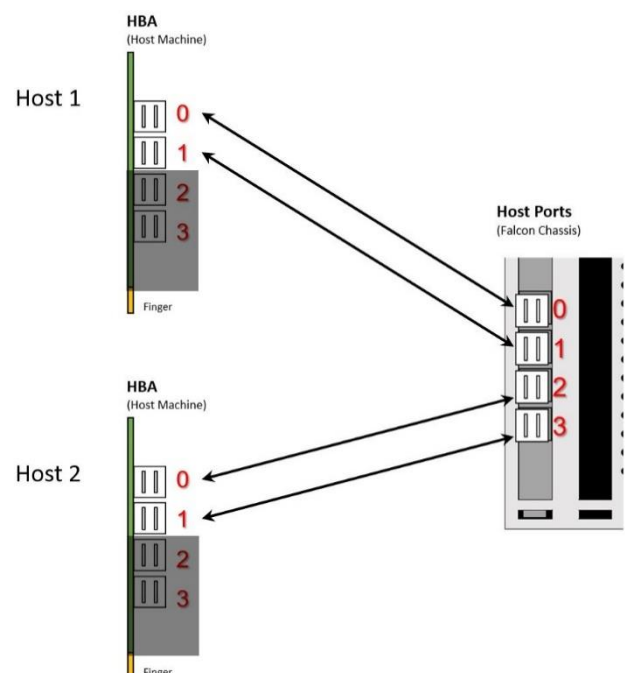
4 port x4 lanes (Advanced mode)

Connect the correspond ports as shown in the right diagram

Host 1	-	Chassis
0	-	0

Host 2	-	Chassis
0	-	1

Host 3	-	Chassis
0	-	2

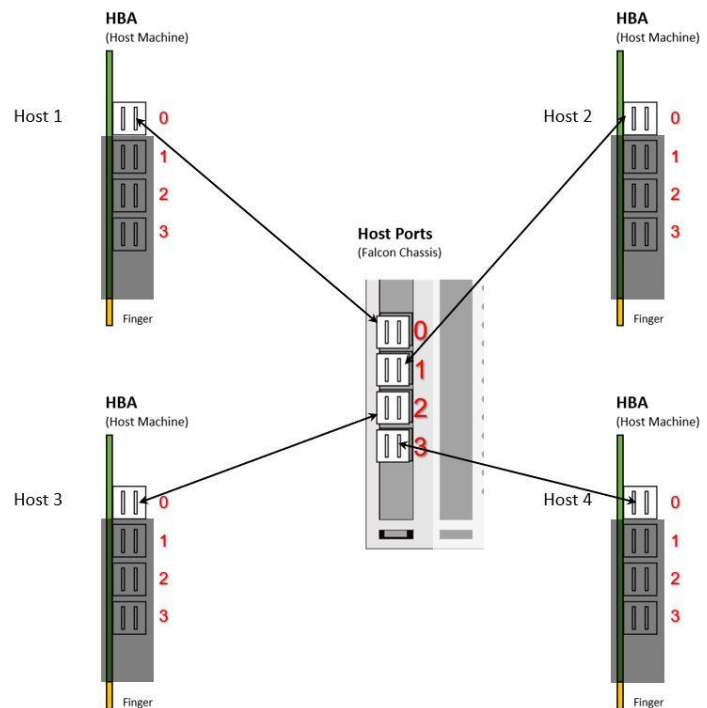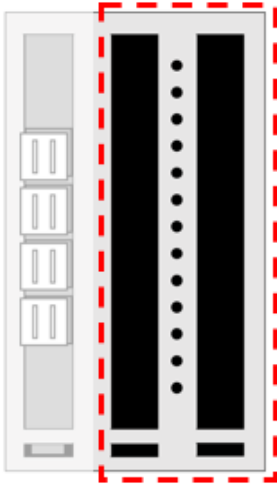| Host 4	-	Chassis
0	-	3

Host 1 will be recognized as 1:H1.0

Host 2 will be recognized as 1:H1.1

Host 3 will be recognized as 1:H1.2

Host 4 will be recognized as 1:H1.3

Additional Host Ports

Please install the re-timer card to the riser slot for additional host port(s). This host port will be recognized as 1:H2

Make sure that the port 1:H2 is configured into **host mode** before installing the re-timer card. See _Falcon-4205 User Manual- Port Configuration_ (7.2.3) for details.

Note:

H3 re-timer card only supports 1x16 configuration now. Bifurcation function coming soon.
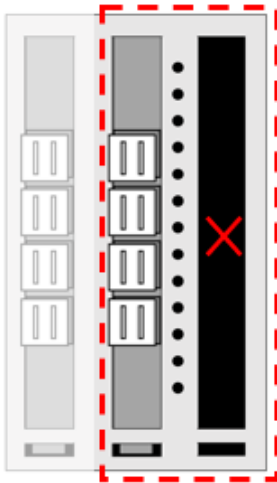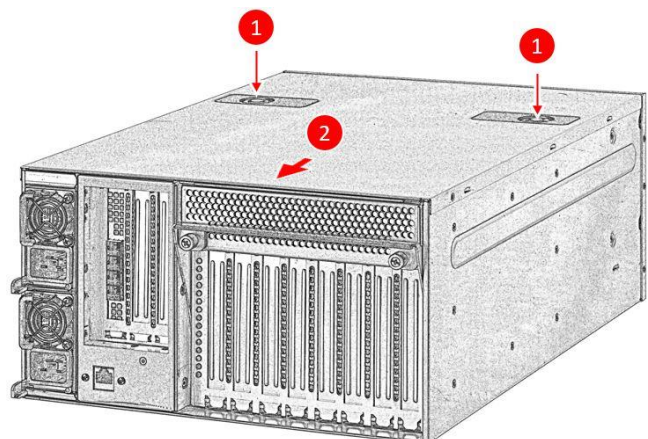
The riser slot is dual width, make sure you install the re-timer card to the left bracket. (immediately next to the host ports)

Correct installation should be as illustrated. The bracket on the right should be empty.

To open the top cover:

1. Press and hold both buttons on the lid
2. Push the lid toward back
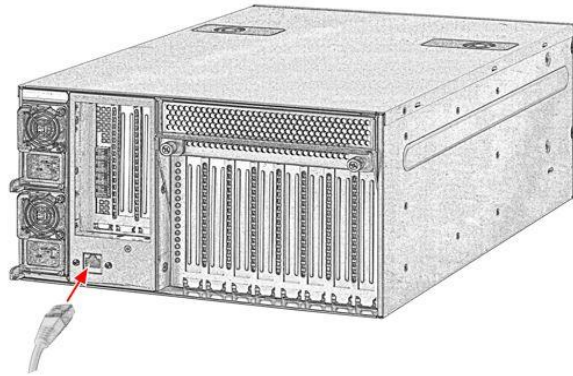
Booting Process

Caution:

    Please complete Falcon 4205 boot up before power on any hosts.

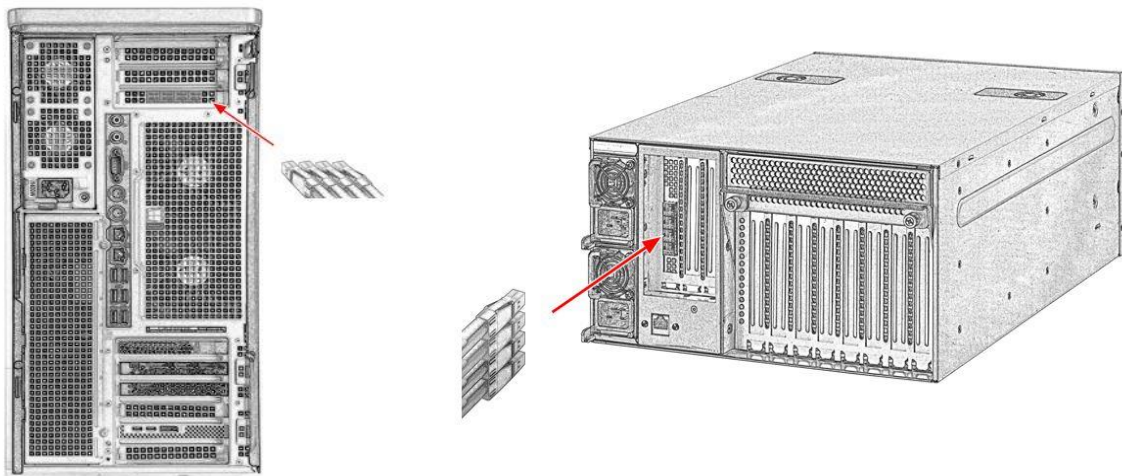   Improper operation can cause system errors.

1. Install GPUs to Falcon 4205

Please refer to the GPU installation section.

2. Connect the management port to your network

3. Connect the chassis to host(s)

The actual position of HBA may look different on your host(s).

For cabling details, please see the Cabling Guide section.

4. Connect to A/C power

Falcon 4205 will be powered-on when the power cords are plugged in. No further action is required for this step.
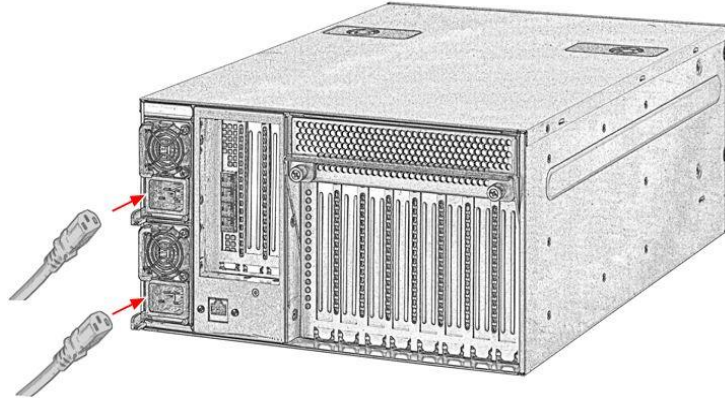
5. Check LCD for system readiness

When the system is ready, the LCD will display the model name and the IP address.

E.g. "Falcon 4205"
      10.0.24.52

You can now proceed to GUI set up

GUI Initial Setup
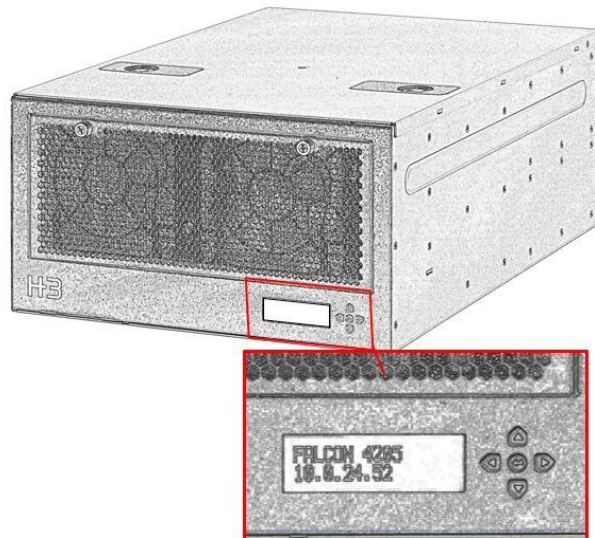
You can access Falcon 4205 GUI with following browsers:

Firefox 3.5 (or higher)

Chrome v_12 (or higher)

Type the IP address of Falcon 4205 to the URL bar to enter GUI. You could find the IP address from the LCM module. Make sure the IP is correct and is under the same subnet as the management machine. You will be asked to complete the initial setup at the first log-in.

Please refer to the following steps to complete initial setup. All settings could still be found in the GUI and be modified anytime.

In some regions, the initial setup is done before shipment. You won't see the initial setup page during your first log-in.

1. License Setting

License keys can be activated anytime later.

If you do not have a premium license key, select "Basic License", leave the field blank, and click "Next" to proceed. The system will default to standard mode (limited to single host connection, without port configuration and device allocation functions).

1. Choose your activation option.

    Select "Basic License" if you have not obtained a premium license. The system will run standard mode.

    Select "Premium License" and enter your license key if you have obtained one. The system will run advanced mode.

2. Click "Next" to proceed to User Setting.

Please contact sales@h3platform.com to purchase Premium License Keys.

2. User Setting

The username for the initial account will be "**admin**" and is not changeable.
You will be asked to reset the log-in password for admin.

1. Type in your new password
2. Confirm new password
3. Click next to proceed to Network Setting

∗ *Please keep your password safe, you will be asked to log-in every time you access GUI*

3. Network Setting

Select "Obtain IP address automatically" if not using static IP.
Select "Obtain DNS server address automatically" if not using specific DNS server.

Setup static IP:

1. Fill in the IP address
2. Fill in the Subnet mask
3. Fill in the Default Gateway
4. Fill in the DNS server address
5. Click Next to proceed to time setting

4. Time Setting

1. Select your time zone
2. Setup the system time

      Synchronize with NTP server:
            Fill in the NTP server (NIST) address
            Click "Sync Now"

      Manual Setting:
            Select a date using calendar
            Set a time

3. Click "Apply" to proceed

＊ *If you do not modify the time settings, the default time will be synchronized to time.nist.gov*

5. Confirm your information

"Confirming Details" will pop-up.
Please make sure that all the information is correct.

Click "No" to keep editing settings.
Click "Yes" to save the settings.

Please do not exit the page when the saving process is loading.

6. Firmware update

Please update to the latest firmware

Files can be found:

https://www.h3platform.com/knowledge-base/document

Go to Knowledge Base→ Download

Product type:	Composable GPU Chassis
Model type:	Falcon 4205
Download item:	Firmware
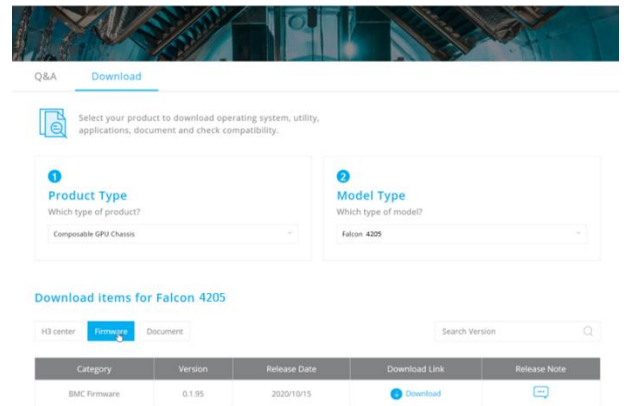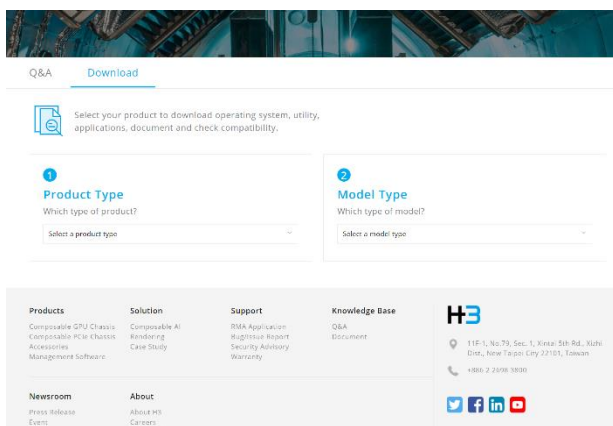
1. Download the firmware file to your device (i.e., your PC)

2. Go to Falcon 4205 GUI → Maintenance page
   Click "Upload/Install"

Upload the firmware **.img** file. The confirmation message will pop-up, **confirm that you have disconnected all host machines** then click "Yes" to proceed. The system will automatically detect which firmware file is uploaded. (BMC or PCIe switch)
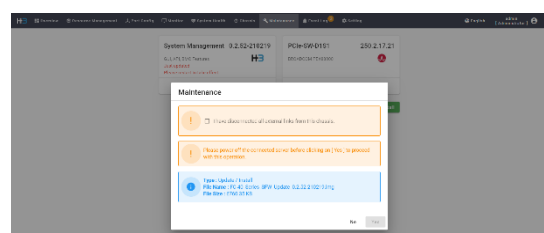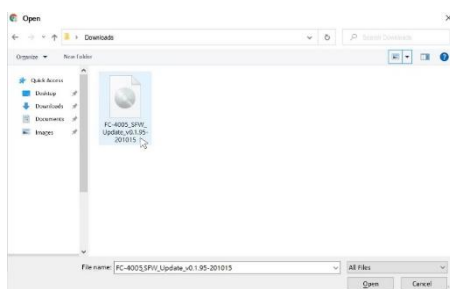
When the update completes, click "restart now" the system will reboot automatically.

The firmware update is completed after rebooting.

The Falcon 4205 installation and initial set-up are completed.
Please see Falcon 4205 User Manual for more operation details.

Warranty

H3 Platform offers free 2-year limited warranty service on our products. If the standard warranty period is not enough, H3 Platform offers optional purchase extended warranty service coverage that will provide warranty for 1, 2, or 3 additional years.

Limited Warranty

H3 Platform warrants its products against defects in material and workmanship. Under normal use and service, every hardware portion of the products will be free from physical defects in material and workmanship during the warranty period, or the product will be repaired or replaced as determined solely by H3 Platform. H3 Platform provides a limited warranty for its products only to the person or entity that originally purchased the product from H3 Platform or its authorized distributor or retailer. H3 Platform's products are PCI switches, and H3 Platform makes no warranty of the devices installed, or warranty on compatibility of all PCIe devices. H3 Platform will not be liable in any way for the loss of data stored on H3 Platform products and any damage caused by this.

Extra warranty period might be provided by H3 Platform's worldwide dealers/distributors. Please contact dealers/ distributors to purchase the extended warranty.

If a product does not operate as warranted above during the applicable warranty period, H3 Platform shall, at its option and expense (except for shipping cost), repair the defective product or part, deliver to the customer an equivalent product or part to replace the defective item. All products that are replaced will become the property of H3 Platform. Replacement products may be new or reconditioned.

Warranty does not apply, if:

1. The warranty period is expired,
2. The warranty label is broken or removed,
3. The serial number label is missing or unrecognizable,
4. The product has been modified or repaired by any unauthorized service center or personnel.
5. The defect was subject to abuse, improper use not conforming to product manual instructions, or environment conditions more severe than those specified in the manual and specification.
6. The defect was subject to Force Majeure, such as acts of God, flood, lighting, earthquake, war, vandalism, theft, brownouts or sags (damage due to low voltage disturbances)
7. Consumables, such as batteries
8. Routine cleaning, or normal cosmetic and mechanical wear
9. Damage caused by misuse, abuse, or neglect
10. Damage caused by parts that were not manufactured or sold by H3 Platform
11. Damage caused by installing devices not on the compatible list
12. Damage caused when warranted parts were repaired or replaced by an organization other than H3 Platform or by a service provider not authorized by H3 Platform.

If the customer's product is not covered under warranty, H3 Platform may offer Repair Services under the customer's payment.

Software Limited Warranty

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H3 Platform warrants all pre-installed H3 Platform software will execute its programming instructions when all files are properly installed. H3 Platform does not warrant that the software will be uninterrupted or error free. In the event H3 Platform software fails to execute its programming instructions during the warranty period, the customer's remedy will be either (1) replacement of the H3 Platform software or (2) a refund upon return of the product and all copies of software as well as installation instructions.

Compatibility

We have tested and verified the compatibility of third-party products and peripherals on the H3 Platform Compatibility List. Please note that the tests conducted in H3 Platform labs may not have covered every aspect and that changes to firmware or hardware may affect device compatibility and stability. H3 Platform does not guarantee the compatibility with third-party products and peripherals on the List and reserves the right to update the List at any time without prior notice.

Repair Service

Warranty and out of warranty service should be obtained by contacting the system integrator/dealer/retailer/e-retailer or distributor where the customer purchased the product. When requesting for service, the proof of purchase and the product serial number must be provided. The return of the defective product should be strictly through the original route of purchase, and the customers shall pack the product appropriately to prevent the returned product from suffering in the transportation.

There are no user serviceable parts inside the product. Do not allow any unauthorized service center or personnel to repair or modify the product. If the original channel is no longer in business or unavailable, the customer may contact H3 Platform Technical Support for international RMA services. In this case, the customer will be charged for handling fee, $50 (USD), and all fees incurred, including two ways freight, duties, taxes and brokerage fee.

It is customer's sole responsibility to back up his/ her data. Before allowing any service from H3 Platform or its service provider, including remote login check and repairing service, the customer must back up the data and remove any of the customer's confidential, proprietary or personal information. Neither H3 Platform nor its service provider will be liable for any damage, loss and exposure of confidential or private information or data contained in any product, hardware, software or media.

Notice of Warranty Claims

All warranty claims must be made during the applicable warranty period. Any claim made after that time will not be eligible for warranty service but may be serviced under a separate H3 Platform support contract covering the product.

DISCLAIMER OF WARRANTY

H3 Platform does not warrant uninterrupted or error-free operation of an H3 Platform product. If the customer transfers an H3 Platform product to another user, warranty service is NOT available to that user for the remainder of the warranty period. Consumables, such as batteries and PCIe power cables have no warranty. The above warranties will not apply to products from which serial numbers have been removed or to defects resulting from misuse (including operation of a H3 Platform product without covers and incorrect input voltage), unauthorized modification, operation or storage outside the environmental specifications for the product, in-transit damage, improper maintenance, or defects resulting from use of third-party software, accessories, media, supplies, consumables, or such items not designed for use with the product. The H3 Platform Software Product Limited Warranty does not apply to software used with products not covered by any of the H3 Platform limited warranties offered as part of your purchase of an H3 Platform product.

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Some Countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. The warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state or province to province.

Limitation of liability and Remedies.

In no event will H3 Platform or its affiliates, subcontractors, or suppliers be liable for any of the following:

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3. Incidental, special, or consequential damages (including lost profits, loss of use, Customer downtime, cost of data recovery/re-creation), even if H3 Platform is informed of their possibility;
4. Third-party claims against Customer for losses or damages.

5. H3 Platform PCIe Switches are not specifically designed, manufactured or intended for sale as parts, components or assemblies for the planning, construction, maintenance, or direct operation of a nuclear facility. Customer is solely liable if Products or Support purchased by Customer are used for these applications.

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