4U8-BAY SERIES SERVER CHASSIS

Product Manual V2.0

CONTENTS
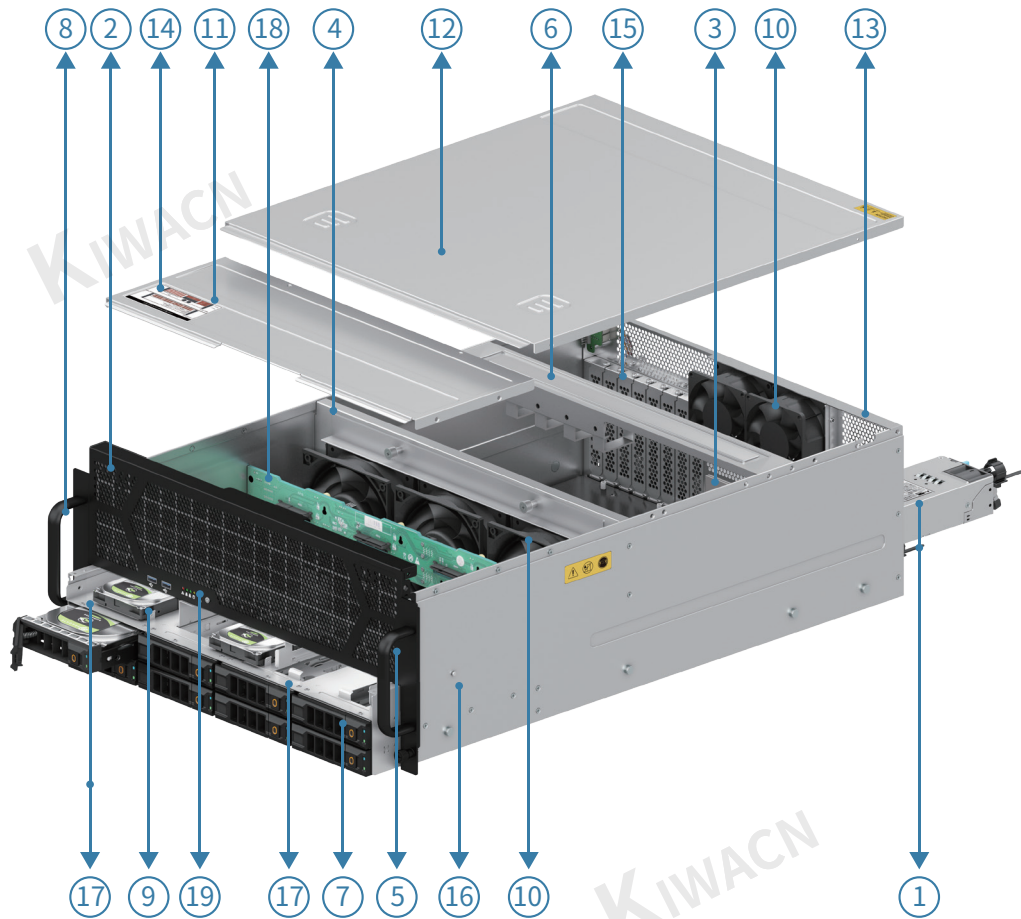
Chapter 1: Product Introduction

1.1 Product Features

Product Code	K24012	K24013	K24016
Chassis Category	4U Rack mount		
Material	SGCC1.2mm(Taiwan)		
MB Form Factor	Extended ATX (12"x13")	Extended ATX (15.12" x 13.2")	
Dimensions (D*W*H)	660 x 435 x 177 (mm) 25.98" x 17.12" x 6.97"		
Drive Bays	3.5" Hot-swap: 8 Internal 2.5": 2		
PSU Form Factor	2U Single or ATX or 1+1 Redundant	Redundant power supply board 2000W Redundant power supply board 3000W(Option)	
Indicators	1 x Power Status, 1 x HDD Activity , 2 x LAN Activity		
Front Control	Power On/Off, System Reset, 2 x USB 2.0		
Cooling Fans	Middle: 3x 12038 Rear inside: 2 x 8025(Option), Rear hanger 2*8038 (Option)		Middle: 8x 8038, PWM Rear inside: 2 x 8025 Rear hanger 2*8038
Expansion Slots	8 x Low Profile	11 x Low Profile	
HDD Backplane	8-port 12Gb/s - SAS, 8-port 6Gb/s - SAS (Option), three model (nvme/u.2/12gb/s) backplane(Option)		
Rack rails	Option		
Net Weight	15.4kg	16.4kg	
Gross Weight	18.1kg	19.1kg	
Package size(D*W*H)	830x600x280mm		

1.2 Chassis Structure

1. Power Supply
2. Front Panel
3. Power Supply Bracket
4. Fan Wall
5. Right Bracket Assembly
6. Graphics Card Bracket
7. 3.5-inch Hard Drive Tray (Supports 2.5-inch Hard Drives)
8. Left Bracket Assembly
9. Internal 2.5-inch Hard Drive Mounting Bracket

10. Fan Module
11. Front Cover
12. Rear Cover
13. Rear Window Assembly
14. Chassis Layout Diagram Sticker
15. Standard 11 PCIe Expansion Slots
16. Chassis Base
17. 8-Bay Hard Drive Cage Module
18. Power Supply and Hard Drive Backplane
19. Switch Component

1.3 Description of Front Panel and Hard Drive Bay

1.3.1 Front Panel and Indicator Lights：
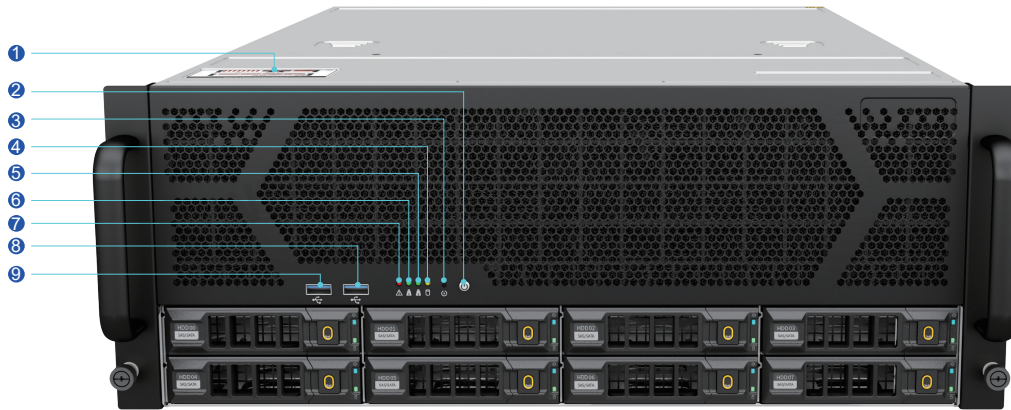
Hard Drive Installation Diagram			
HD00	HD01	HD02	HD03
HD04	HD05	HD06	HD07

1. Chassis Layout Diagram Sticker

2. Power Button

3. Reset Button

4. HDD Indicator Light

5. Ethernet Port Indicator Light

6. Ethernet Port Indicator Light

7. Warning Indicator Light

8. USB Connector

9. USB Connector

Control Panel Buttons and Interface Description：

Power Button	Power button, press once to power on when the system is powered； In the powered-on state, press and hold for 5 seconds to shut down the system.
Reset Button	In the powered-on state, press once to restart the device.
UID Button	In the powered-on state, press once to illuminate the indicator light.

Control Panel Indicator Light Explanation：

| Name	Color	Status	Description
Power Light	Blue	On	The server is in the powered-on state.
UID Light	Blue	On	The server is in the located state.
Fault Indicator Light	Red	On	The server is experiencing a malfunction.
Network 1 Indicator Light	Green	On	The network connection is normal.
Network 2 Indicator Light	Green	On	The network connection is normal.
HDD Indicator Light	Yellow	On	The hard drive is in operational status.

1.3.2 Hard Drive Installation and Hard Drive Tray Indicator Light Instructions：

3.5-inch Hard Drive Installation Guide:
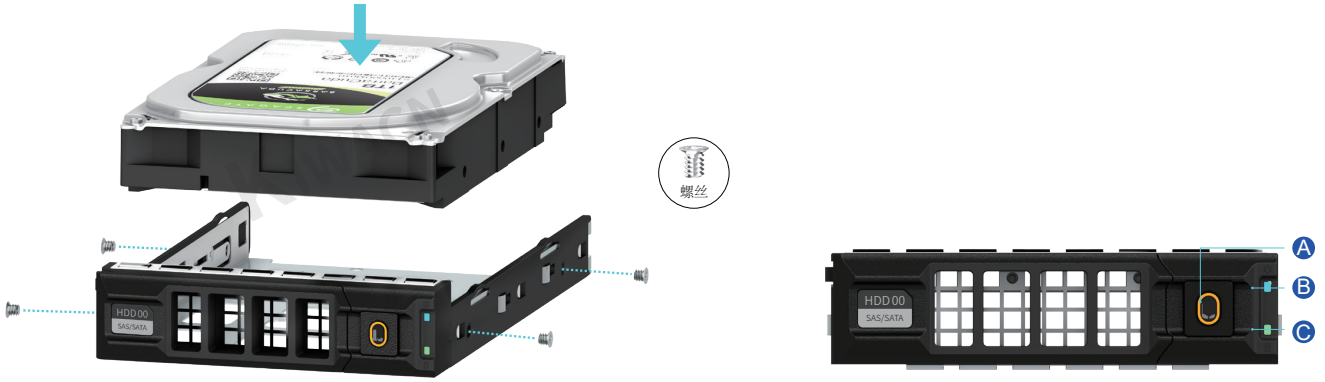
A. Power On Button
B. Power Indicator Light
C. Status Indicator Light

2.5-inch Hard Drive Installation Guide:
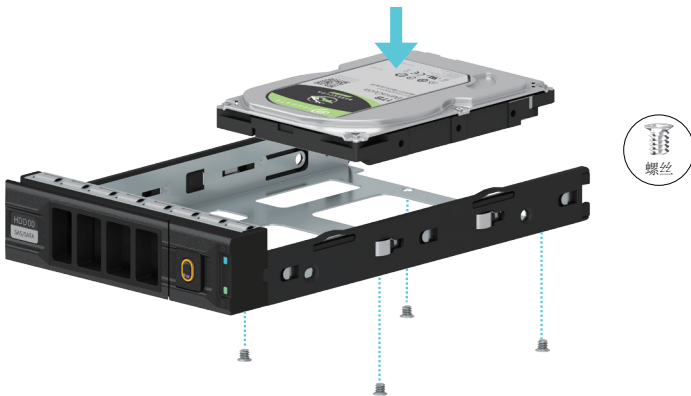
| Hard Drive Tray Indicator Light Instructions	
B	Blue: Hard Drive Powered On
C	Solid Green: Hard Drive in Position
	Flashing Green: Hard Drive Activity
	Solid/Flashing Red: Hard Drive Failure

1.4 Hard Drive Backplane

1.4.1 2U8 12GB Direct Attached Backplane

TOP Plane:

Pay attention to the interface orientation!!!
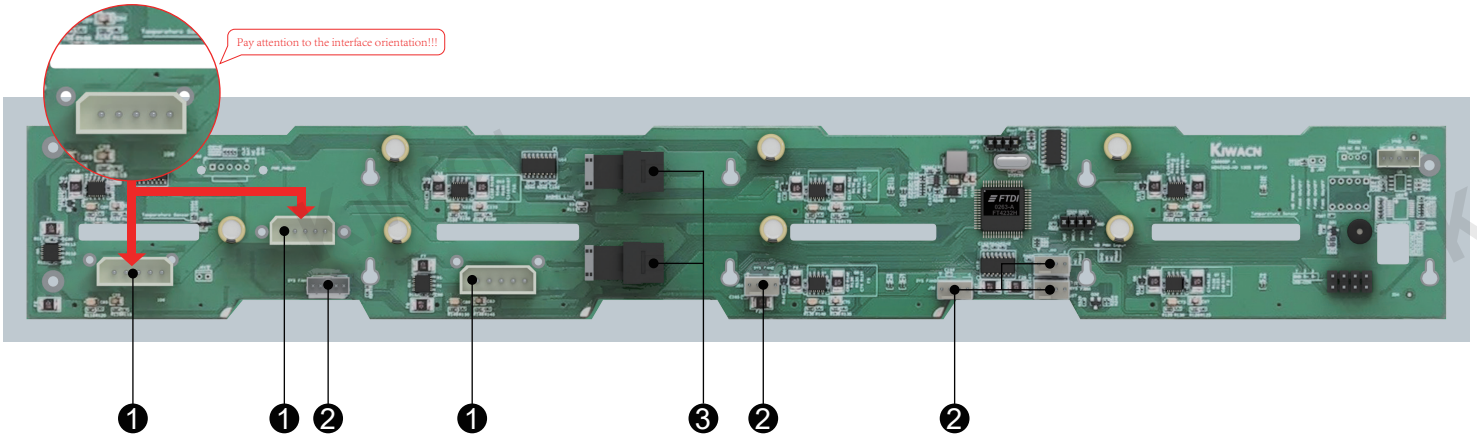
| Label	Device Description	Function Description	Location Identifier
1	ATX 4-pin Power Connector	Backplane Power Transmission Connector, used for 12V power supply transmission. (Pay attention to the orientation of the interface!!! And do not connect it simultaneously with the large 8-pin connector (③)!!!)	J1、J2、J58
2	Fans Connector	For use with 4-pin fan connector	SYS FAN1, SYS FAN2, SYS FAN3, SYS FAN4, J69
3	SFF 8643 Connector	Backplane Drive Slot Signal Interface	SASHD1、SASHD2

BOTTOM Plane:
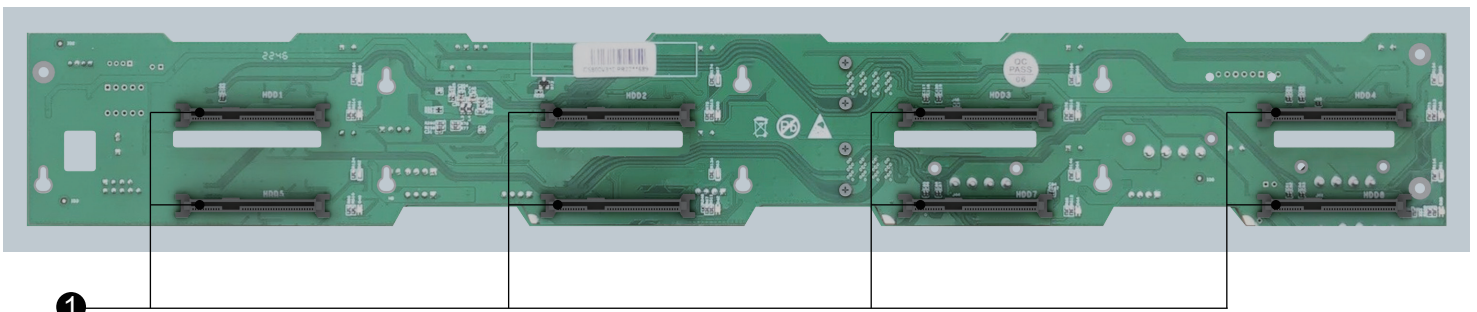
Label	Device Description	Function Description	Location Identifier
1	SAS/SATA Hard Drive Connector	1.Supports up to 12G/b SAS Hard Drives; 2.Supports up to 6G/b SATA Hard Drives; 3.Supports Hot-Swappable SAS/SATA Hard Drives。	HDD1, HDD2,HDD3, HDD4, HDD5,HDD6, HDD7,HDD8

Chapter 2: Product Appearance

2.1 Chassis Structure
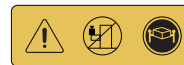
2.1.1 Chassis Diagram

Configuration and Layout
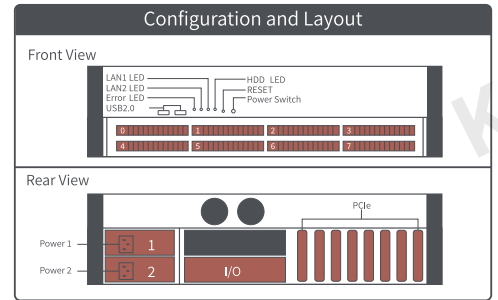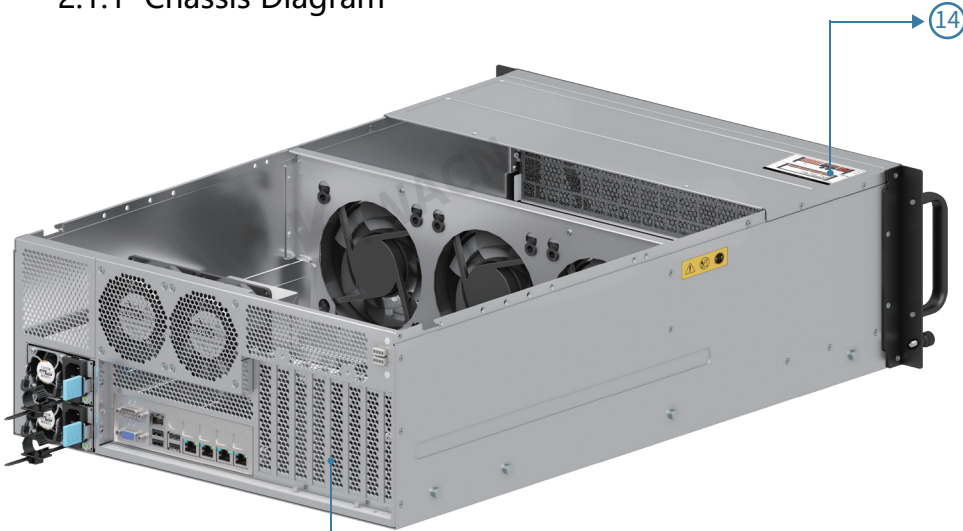
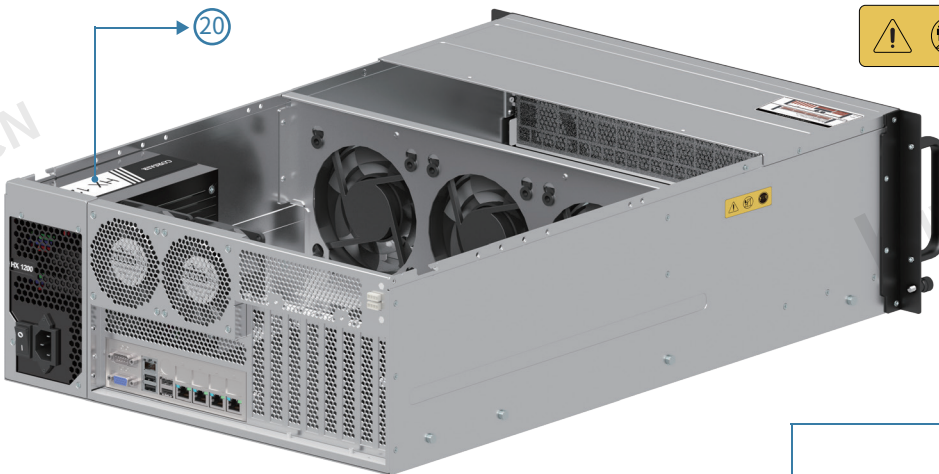⑭ Chassis Layout Diagram Sticker

⑮ Standard 8 PCIe Expansion Slots

CAUTION
请注意此处高温高压危险！
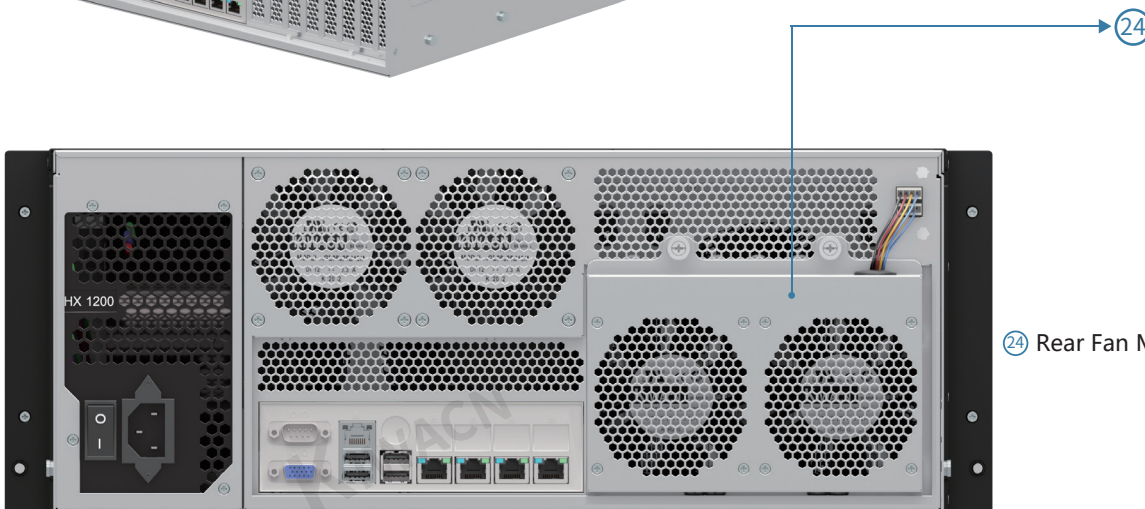Please note high temperature and
high voltage danger here!

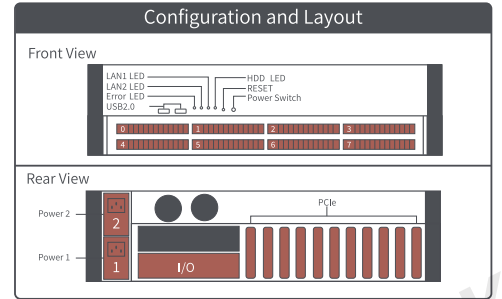Notice: Caution, High Voltage Hazard

Notice: Do not place liquids, handle with care

⑳ ATX Power Supply(Optional)

㉔ Rear Fan Module(Optional)

⑭

Configuration and Layout

Front View

LAN1 LED
LAN2 LED
Error LED
USB2.0

HDD LED
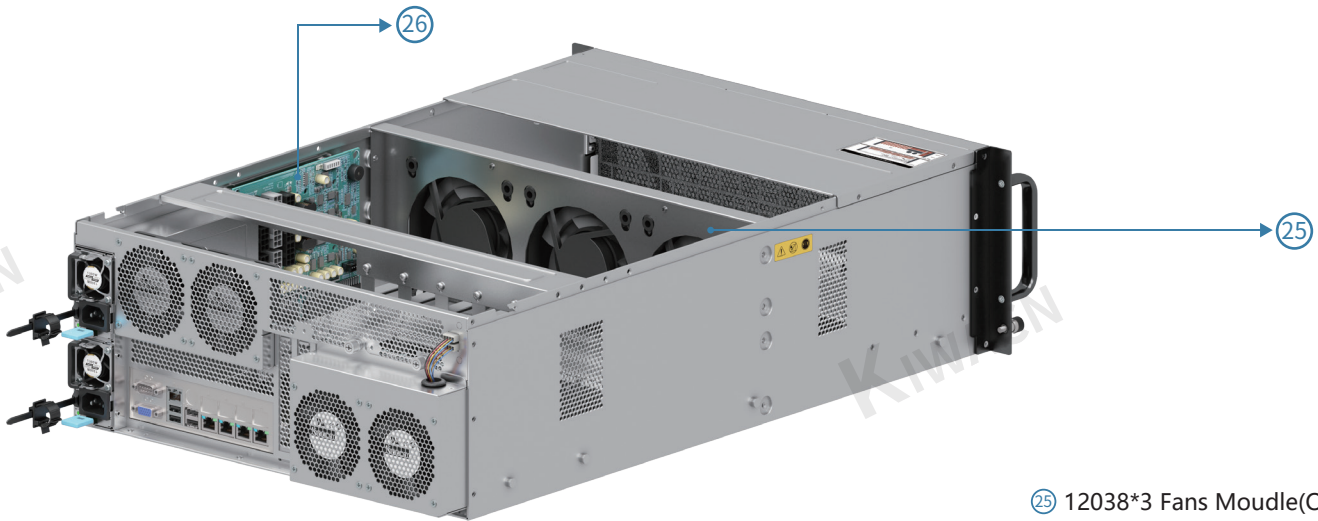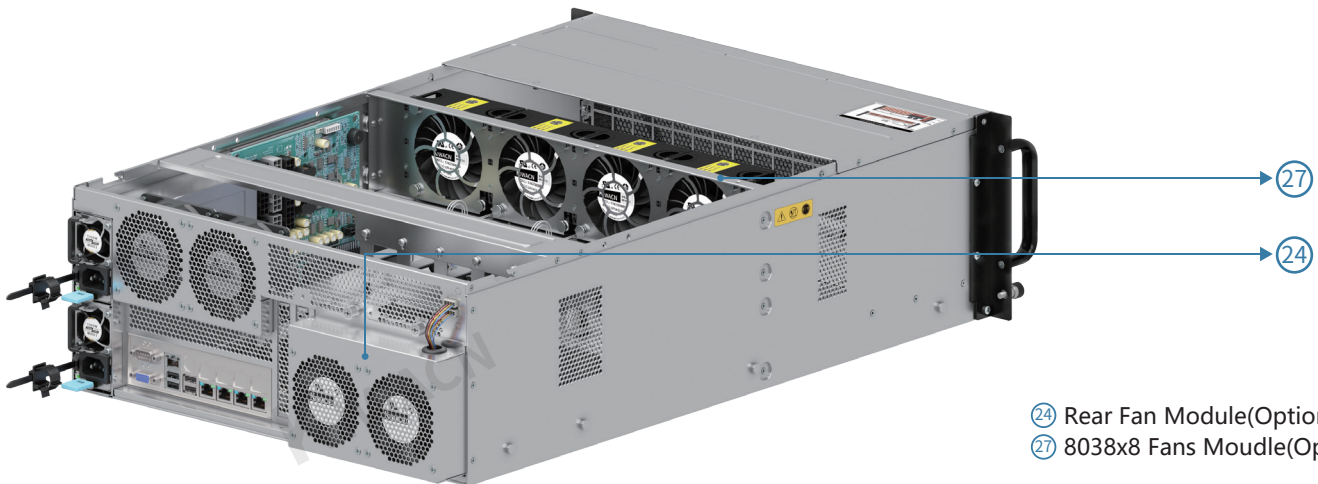RESET
Power Switch

| 0 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 |

Rear View

Power 2   2

Power 1   1   I/O

PCIe

⑲
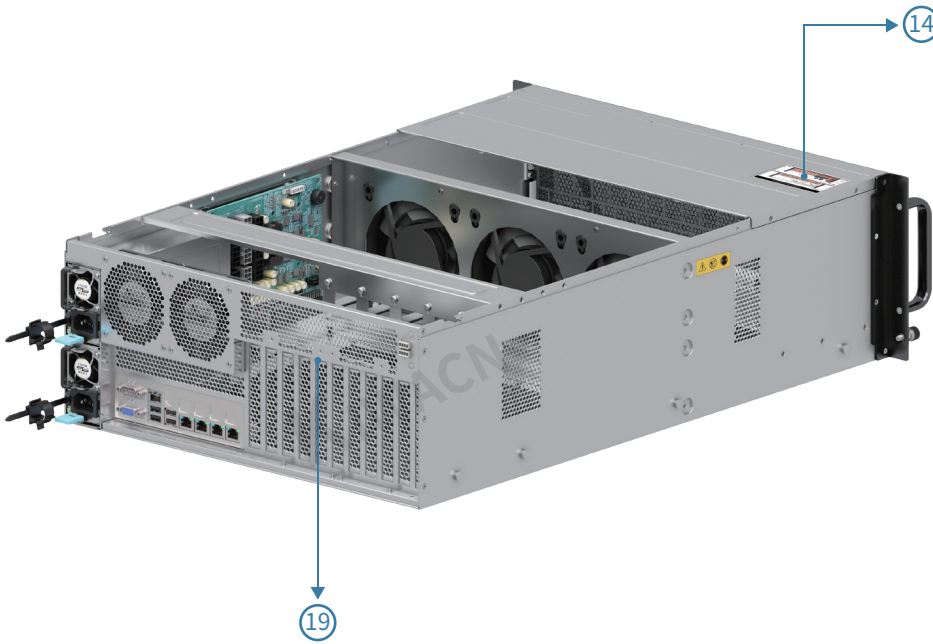
⑭ Chassis Layout Diagram Sticker

⑲ Standard 11 PCIe Expansion Slots

⑯

㉕

㉕ 12038*3 Fans Moudle(Optional)

㉖ Power Supply Board Power(Optional)

㉗

㉔

㉔ Rear Fan Module(Optional)

㉗ 8038x8 Fans Moudle(Optional)

2.1.2 Server Chassis Images

Front View
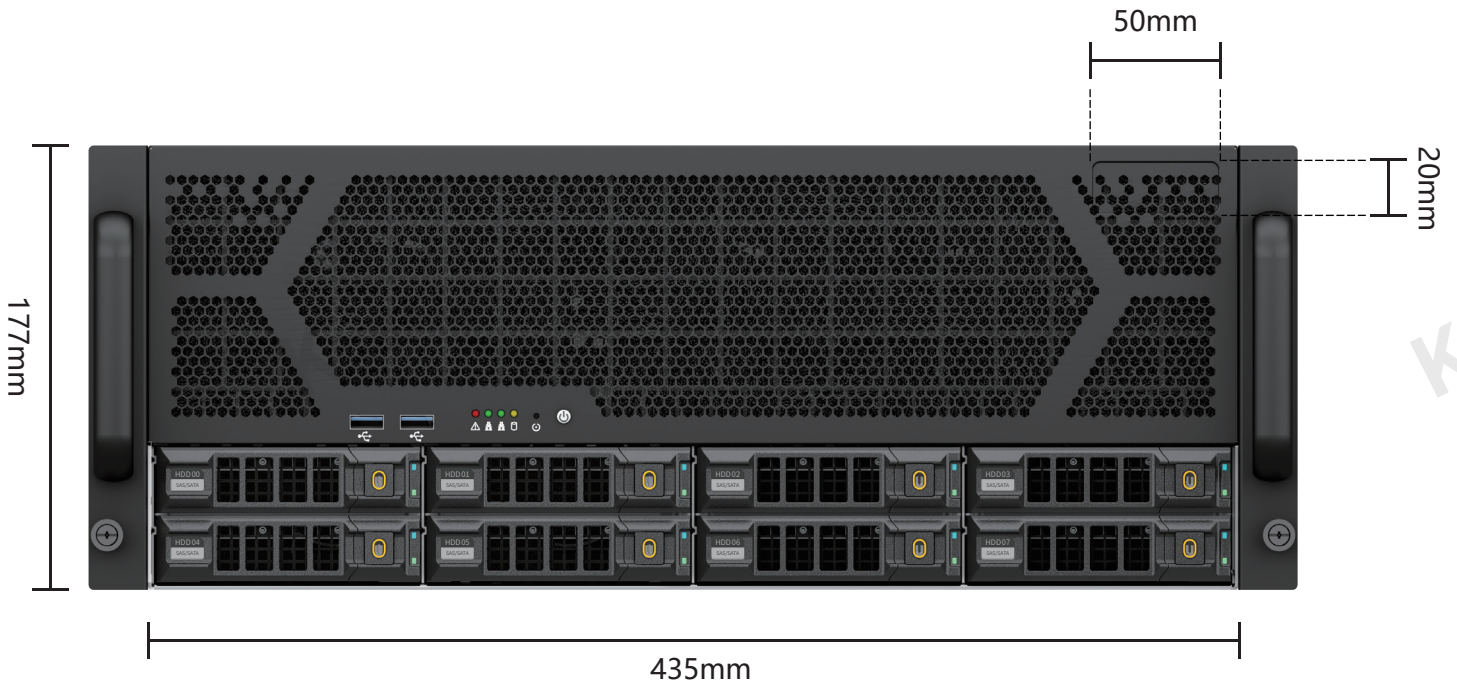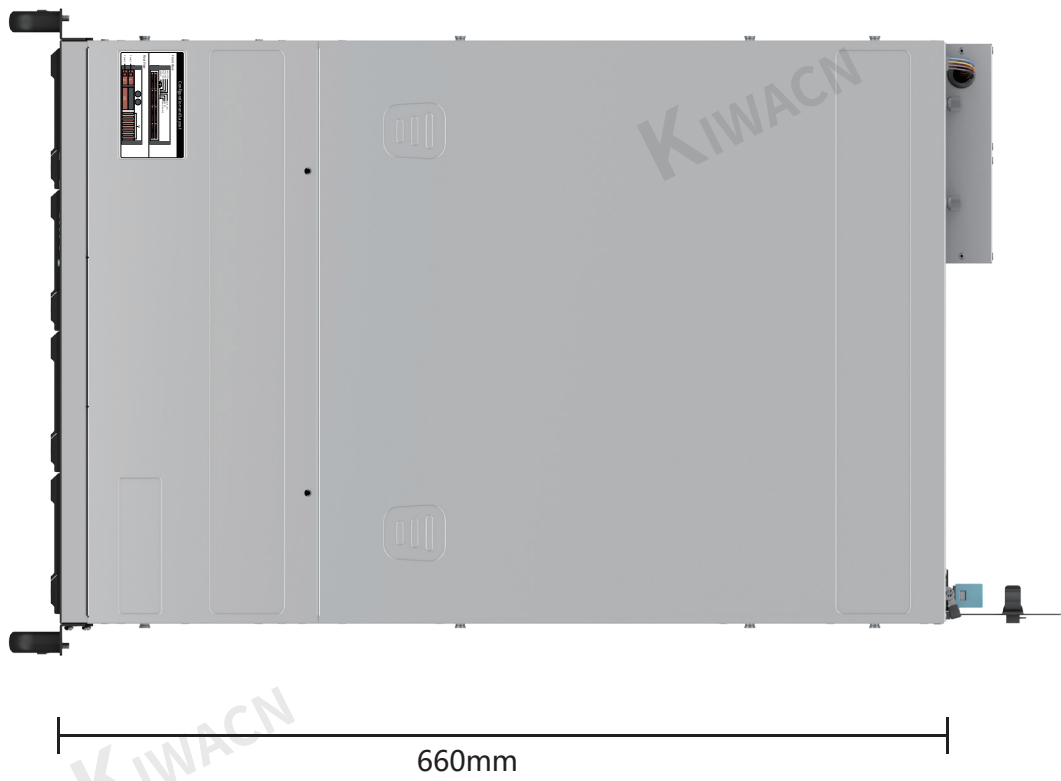

45° Side View

45° Rear View

2.1.3 Server Dimensions

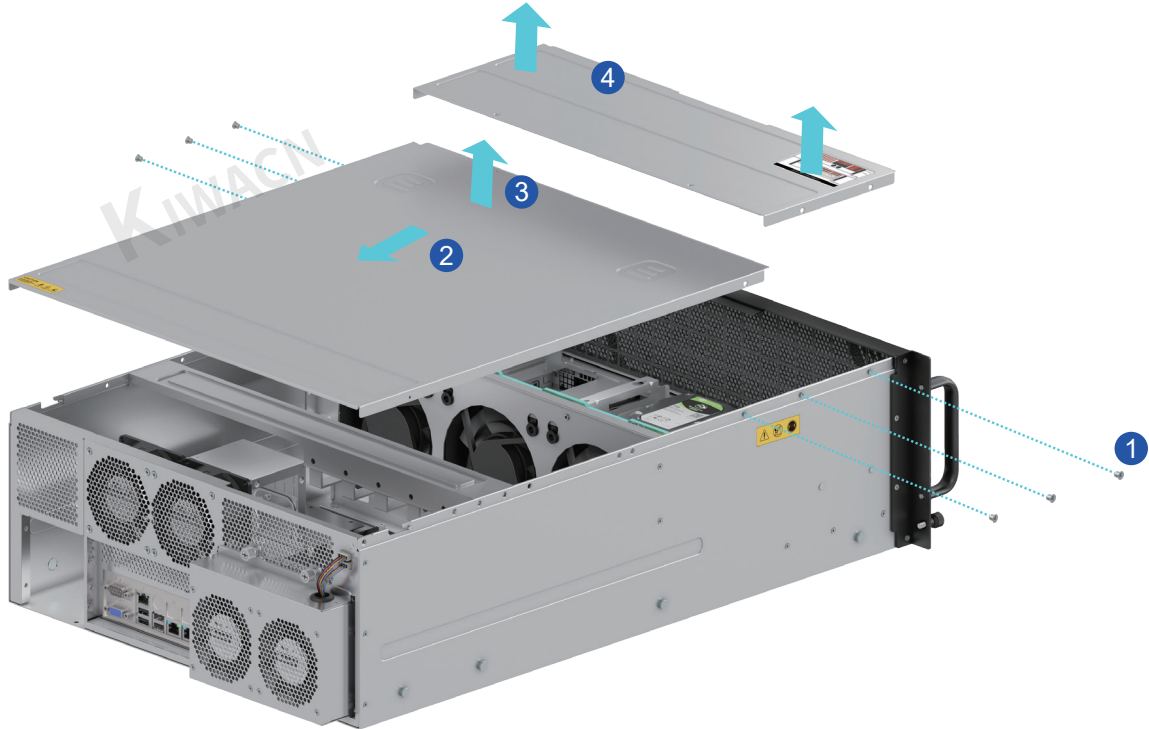Front View (Dimensions)

Top View (Dimensions)

Chapter 3　Product Loading and Unloading
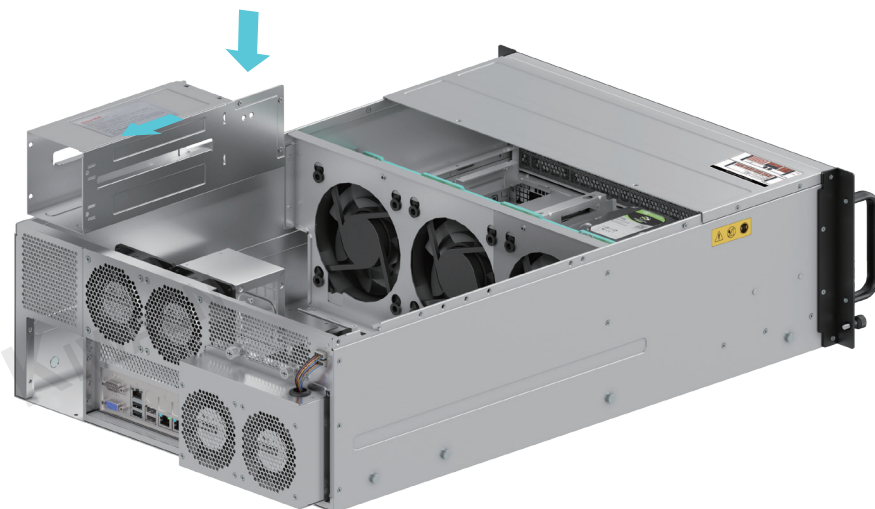
3.1　Installation of Optical Drive

3.1.1　Steps of Installing the Optical Drive：


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Loosen the screws on both sides in the order shown in the diagram.
Slide the top cover towards the back in the direction of the arrow.
Lift off the top cover in the direction indicated by the arrow.
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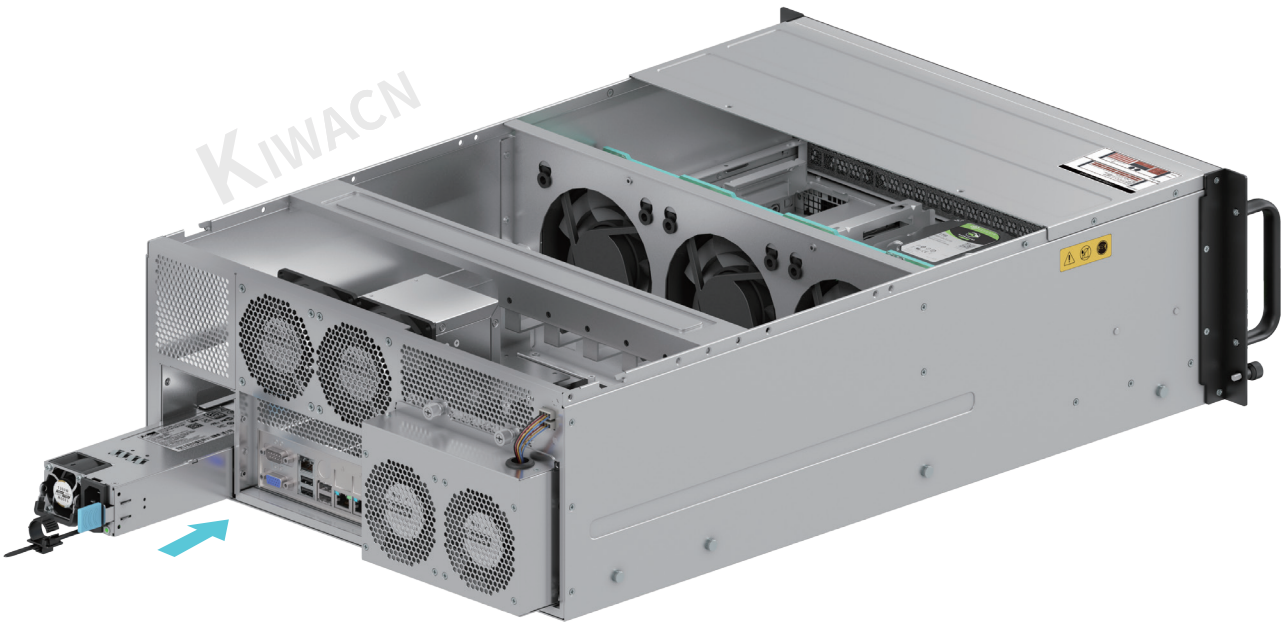
3.2 Removal of the Rear Top Cover

3.2.1 Disassembly Steps：

Lower the power supply bracket down, affix it to the bottom of the chassis, and push it towards the rear end. Secure three screws at the rear, and two screws from the bottom.

Note: Different power supply brackets may have slight variations in screw positions and quantity.
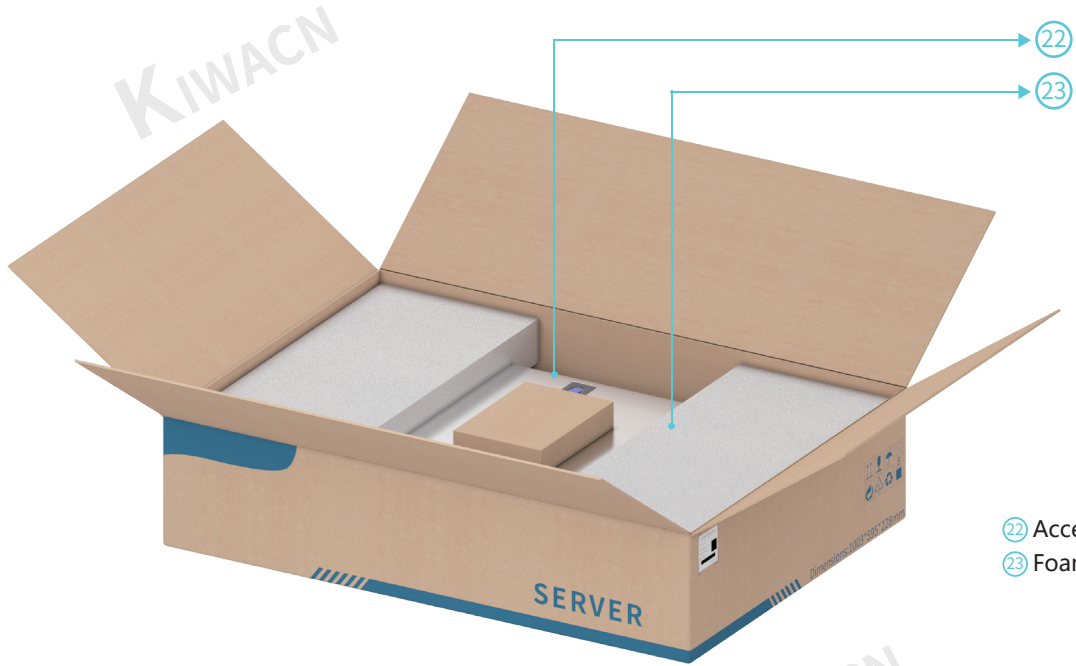

Insert power supply modules 1 and 2 into the power supply frame respectively
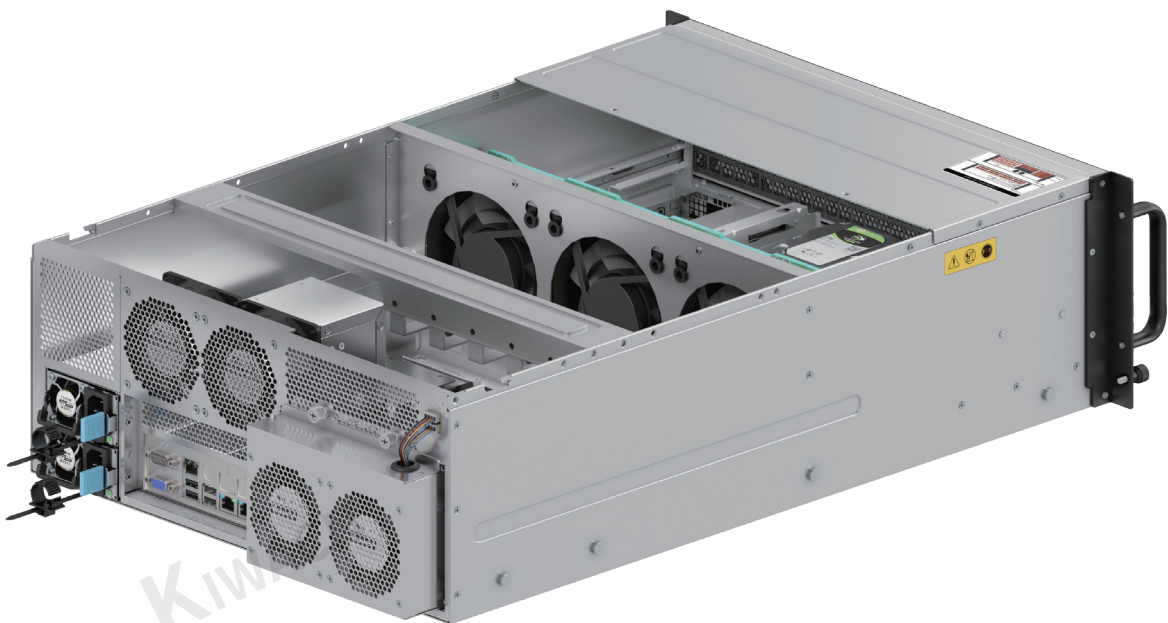
View of Installed Power Supply Unit

Chapter 4   Product Loading

4.1 Product Packaging

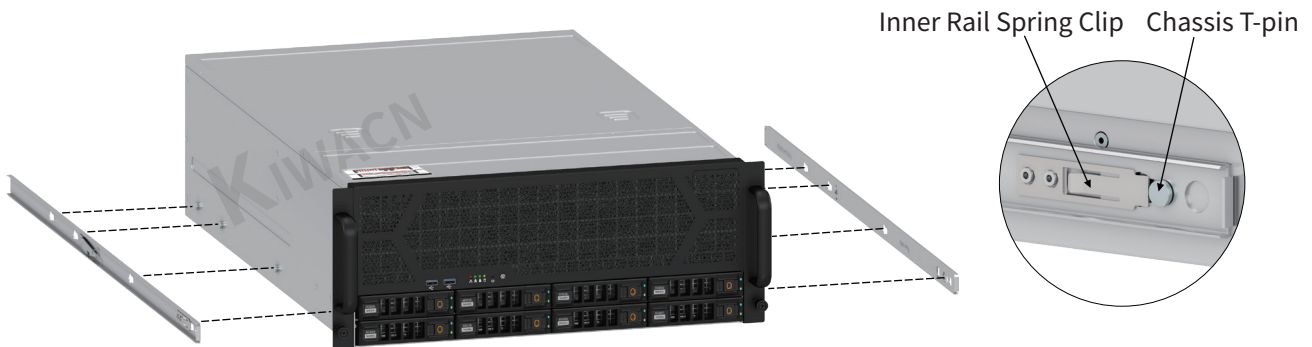
22 Accessory Box
23 Foam

Place it into the suitcase

Seal the suitcase

Chapter 5 Product and Rail Installation

5.1 Install inner rails on both sides of the chassis

5.1.1 Securely attach the inner rail to the side wall of the chassis, and ensure that the inner rail's latch engages with the chassis T-pin.

Inner Rail Spring Clip   Chassis T-pin

The inner rail spring clip engages with the chassis T-pin.

5.2 The chassis is mounted into the rack

(Note: Depending on the weight of the chassis, this step requires the cooperation of 2 to 4 people.)

5.2.1 First, move the ball seat to the front end of the middle track. Then, along the G direction, horizontally insert the inner rail of the chassis into the ball seat.

5.2.2 When installing the rails, ensure that both sides of the server are kept level, and insert the inner rails simultaneously in a horizontal direction.

5.2.3 Ensure that the inner rails have entered the guides and ball seats before proceeding to push them into the chassis.

5.2.4 Only release the chassis after confirming that the inner rails have entered at least half of the ball seats.

5.2.5 There is a limiting buckle on the inner rail. When pushing it into the second section, you need to flip this buckle to enter the third section for complete closure

5.2.5 If you find that the inner rails have not entered the ball seats, please repeat the above steps. If necessary, you can use your hand to assist the inner rails into the ball seats.

5.2.6 Unlock both levers on the sides, then push the chassis to fully close it. Perform at least one complete open and close cycle of the chassis to ensure the slides are correctly installed.

Middle Track

Ball Seat

The ball seat must be moved to the very front

Inner Rail Guide

G

Limiting Buckle
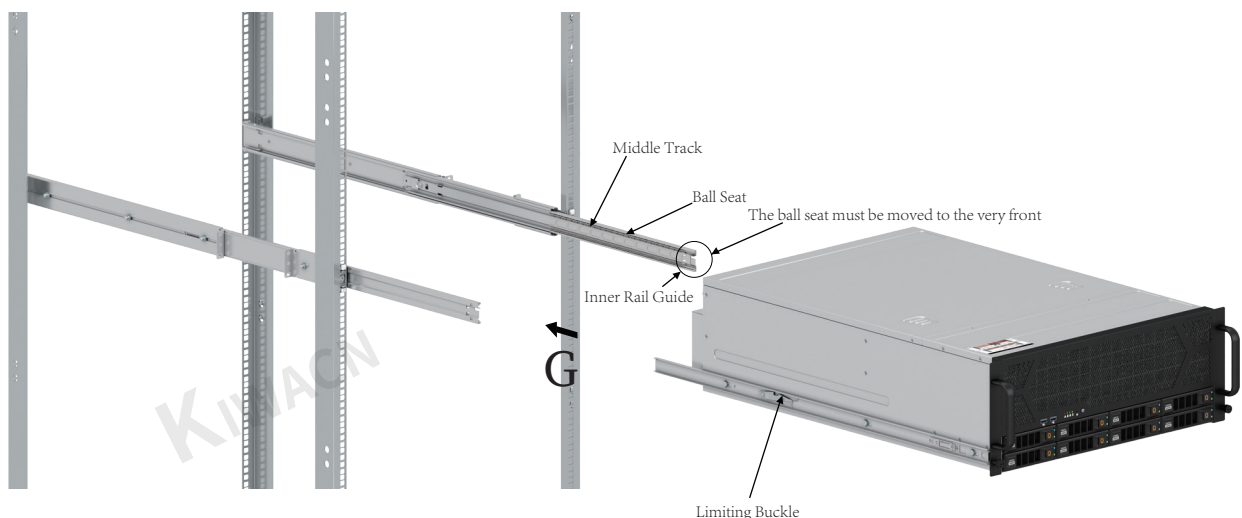
Note: Please make sure to insert horizontally in this direction. Otherwise, it may damage the ball seats and cause the slides to not function properly.
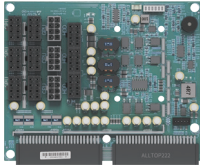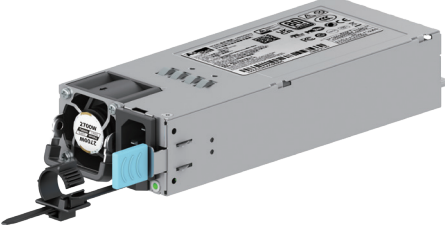
Chapter 6 Accessory Name and Part Number

6.1 Accessories and Material Numbers(Parts Box P/N:0201070009)

Applicable Type： K24012

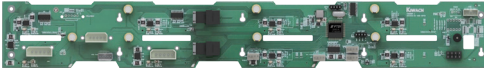| No.	Part No.	Name	Photograph	Quantity
01	P/N: 0305010001	2.5-inch hard drive screws (Compatible with 3.5-inch hard drive bay)		56
02	P/N:0305010031	3.5inch hard drive screws		48
03	P/N:0305010124	2.5-inch Hard drive retaining screws		4
04	P/N:0305070003	Motherboard heightening column (Motherboard thickness1.6mm)		12
05	P/N:0305010203	Motherboard screws		12
06	P/N:0202110015	2.5Hard drive holder (2U8)		2
07	P/N:0305010125	Fixed single power/ATX		4
08	P/N:0305010025	Fixed redundancy		8
09	P/N:04.02.0009	hard drive sticker (00-11)	HDD 00 SAS/SATA	1

6.2 Optional Accessories List
(visit the website for the detail parameter: https://kiwaworld.com/product/10.html)

No.	Part No.	Name	Photograph
01	P/N:0304100006	Slide Rail	
02	P/N:030220004	side power backplane (3000w)	
03	P/N:0304010021	power moudle (2700w)	
04	P/N:0304090001	SAS（8643）cable	
05	P/N:0304090012	SAS（8643）cable	
06	P/N:0304090026	NVME cable (8654 4i to 8i)	
07	P/N:0302060008	6GB backet plane	
08	P/N:0201040016	rear cooling fans moudle	
09	P/N:0201120028	8bays three models (nvme/u.2/12GB backplane)	
10	P/N:0201120027	8bays 12BG backplane	