4U12-BAY SERIES SERVER CHASSIS

Product Manual V2.0

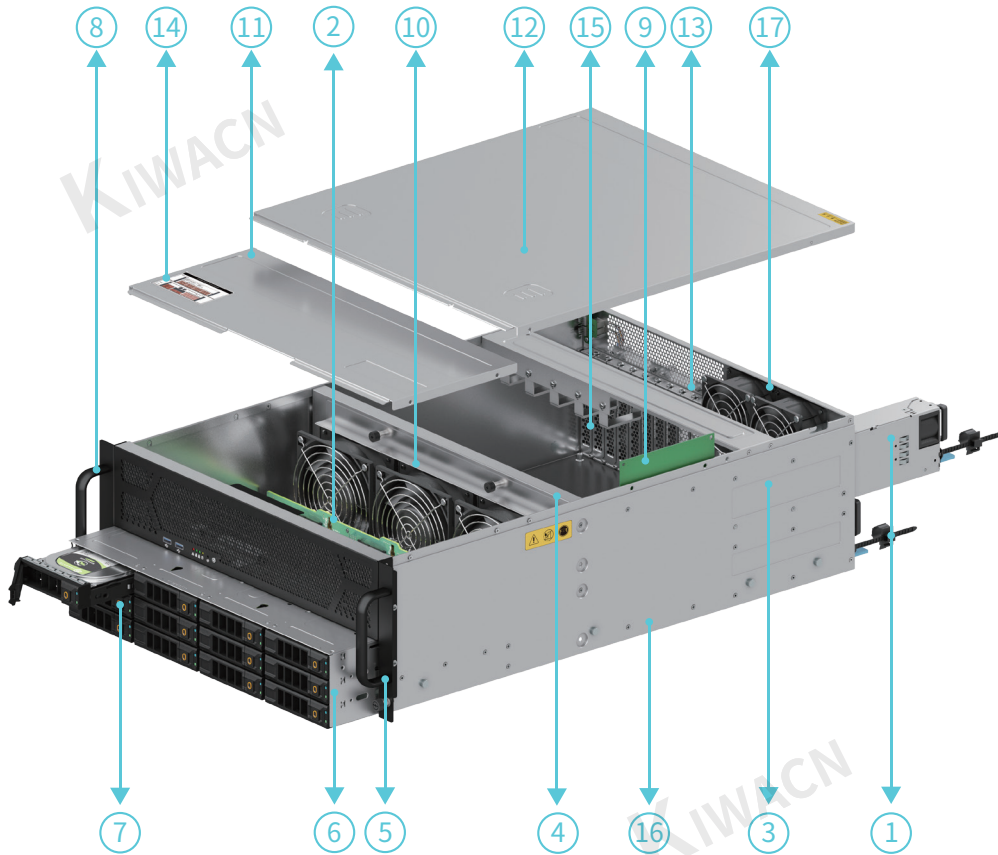# CONTENTS

Chapter 1: Product Introduction

1.1 Product Features

| Product Code	K24008	K24022
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：12 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	12 port 12Gb/s - SAS backplane 8-port three models(Option), 8-port 12gb (Option), 4-port three models(Option), 4-port 12gb(Option),	
Rack rails	P/N:0304100006(Option)	
Net Weight	16.4kg	17.5kg
Gross Weight	19.1kg	17.5kg
Package size(D*W*H)	830x600x280mm	

1.2 Chassis Structure

1. Power Supply
2. Hard Drive Backplane
3. Power Supply Bracket
4. Fan Wall
5. Right Bracket Assembly
6. 2u12 Hard Drive Cage Assembly
7. 3.5-inch Hard Drive Tray (Supports 2.5-inch Hard Drives)
8. Left Bracket Assembly
9. Side-mounted Power Circuit Board

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. Cooling Fans

1.3 Description of Front Panel and Hard Drive Bay

1.3.1 Front Panel and Indicator Lights：
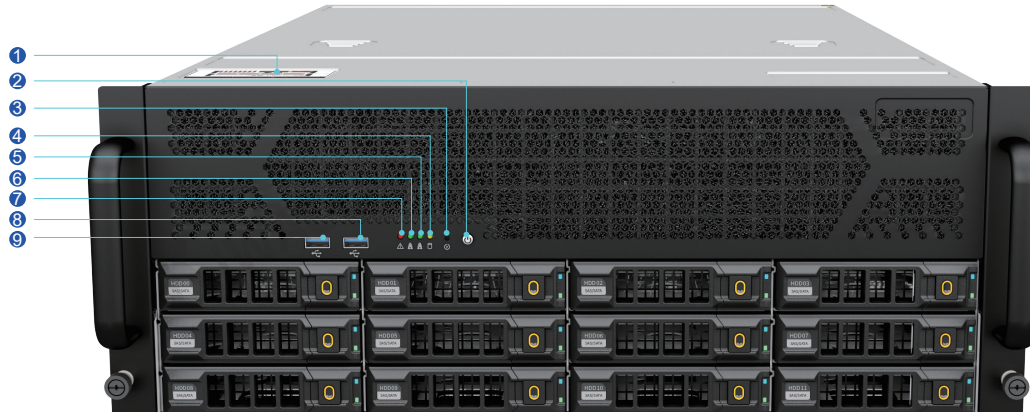
Hard Drive Installation Diagram			
HD00	HD01	HD02	HD03
HD04	HD05	HD06	HD07
HD08	HD09	HD10	HD11

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:

螺丝

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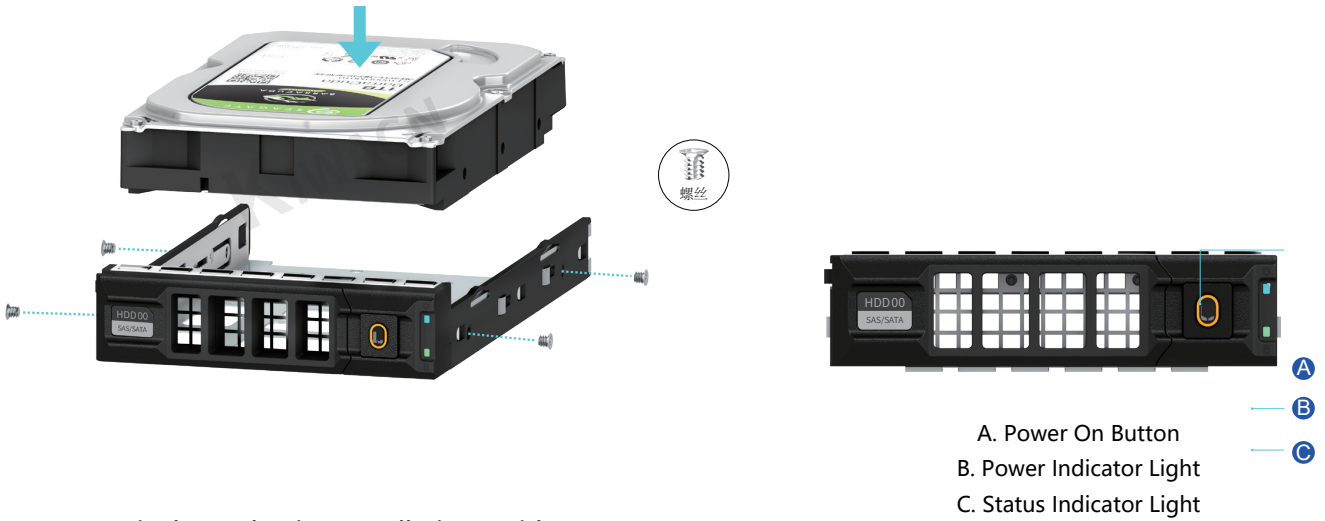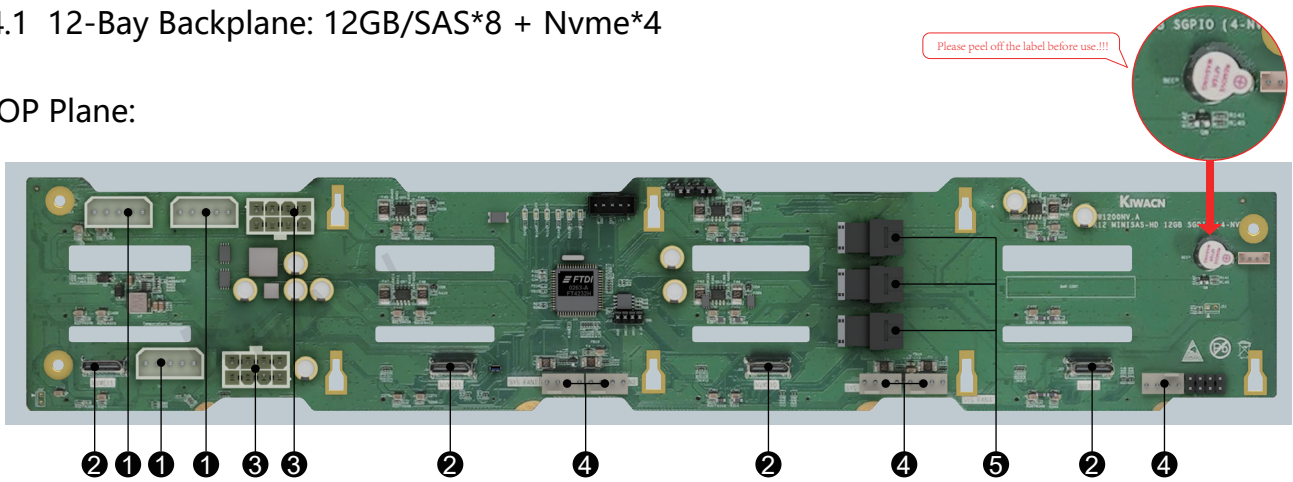
2.5-inch Hard Drive Installation Guide:

螺丝
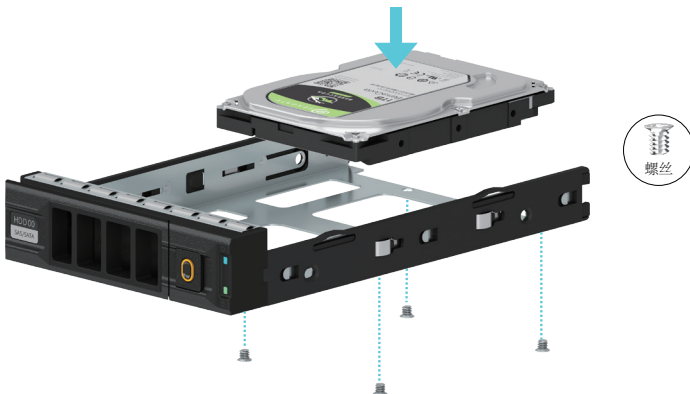
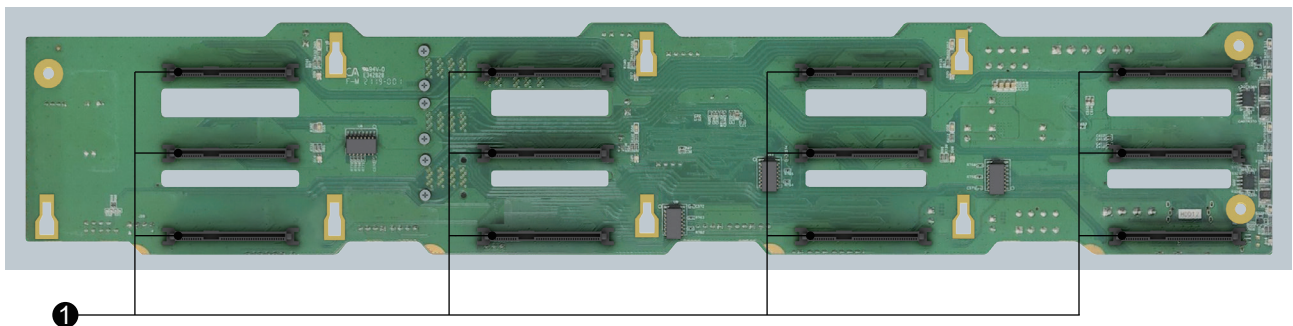| Hard Drive Tray Indicator Light Instructions	
B	Blue: Hard Drive Powered On
C	Solid Green: Hard Drive in Position
	Flashing Green: Hard Drive Activity
	Solid/Flashing Red: Hard Drive Failure

1.4 Hard Drive Backplane

1.4.1 12-Bay Backplane: 12GB/SAS*8 + Nvme*4

TOP Plane:

Please peel off the label before use.!!!

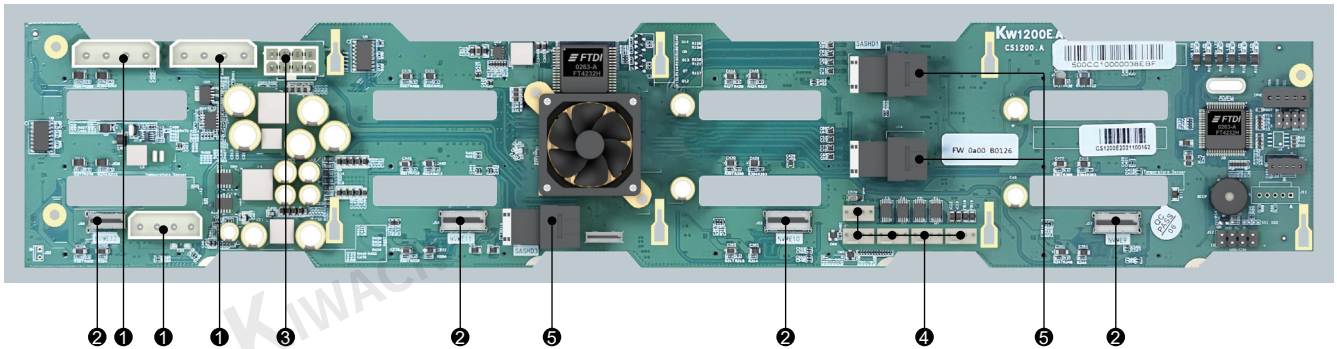| Label	Device Description	Function Description	Location Identifier
1	ATX 4P Power Connector	Backplane Power Transmission Connector, used for 12V power supply transmission. (Pay attention to the orientation of the interface!!! And do not connect it simultaneously with the large 8-pin connector (③)!!!	J2、J4、J6
2	Nvme 8611Connector	Nvme 3.0 Connector(Optional)	NVME9、NVME10、NVME11、NVME12
3	8P Power Connector	Backplane Power Transmission Connector, used for 12V power supply transmission Note: Cannot be connected simultaneously with the large 8-pin connector (①)	J5、J60
4	Fan Power Connector	For use with 4-pin fan connector	SYS FAN1, SYS FAN2, SYS FAN3, SYS FAN4
5	8SFF8643 Connector	Backplane Drive Slot Signal Interface	SASHD1, SASHD2, SASHD3

BOTTOM Plane:

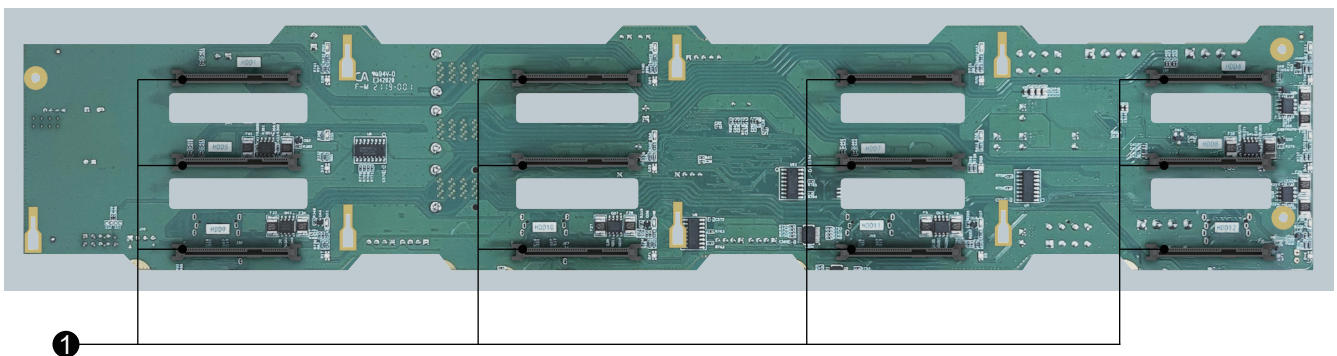| Label	Device Description	Function Description	Function Description
1	SAS/SATA Hard Drive Connector	1.Supports up to 12G/b SAS Hard Drives; 2.Supports up to 6G/b SATA Hard Drives; 3.Supports Hot-Swappable SAS/SATA Hard Drives。	HDD1、HDD2、HDD3、HDD4、HDD5、HDD6、HDD7、HDD8、HDD9、HDD10、HDD11、HDD12

1.4.2 12-Bay Backplane: 12Gb/s Expander

TOP Plane:

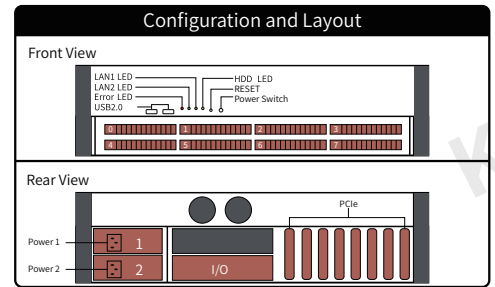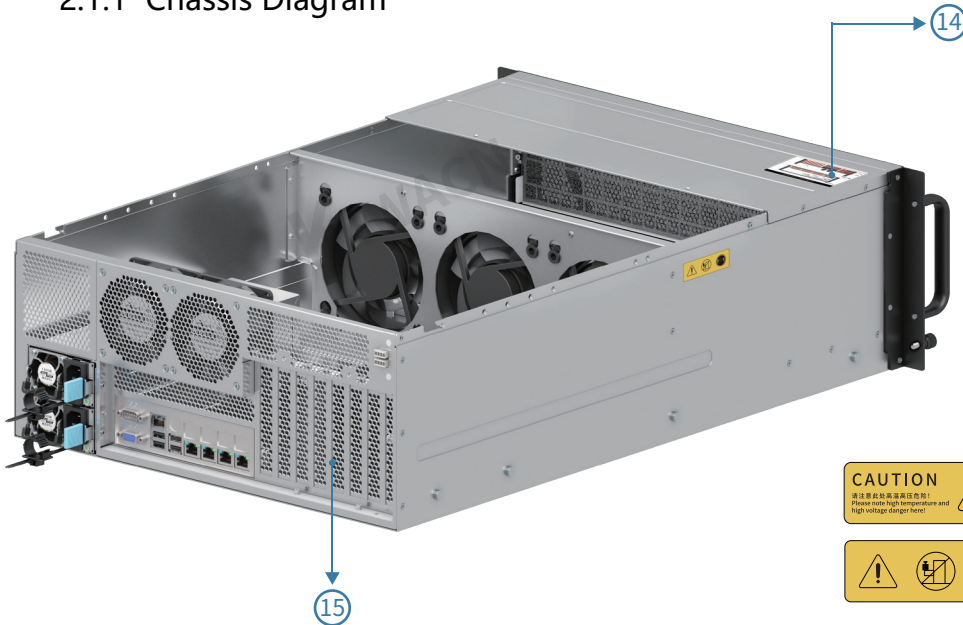| Label	Device Description	Function Description	Location Identifier
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2	Nvme 8611Connector	Nvme 3.0 Connector(Optional)	NVME9, NVME10, NVME11, NVME12
3	8P Power Connector	Backplane Power Transmission Connector, used for 12V power supply transmission (Note: Cannot be connected simultaneously with the large 8-pin connector (①)!!!)	J5
4	Fan Power Connector	For use with 4-pin fan connector	J44, SYS FAN1, SYS FAN2, SYS FAN3, SYS FAN4
5	8SFF8643 Connector	Backplane Drive Slot Signal Interface	SASHD1, SASHD2, SASHD3

BOTTOM Plane:

Label	Device Description	Function Description	Function Description
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、HDD9、HDD10、HDD11、HDD12

Chapter 2: Product Appearance

2.1 Chassis Structure

2.1.1 Chassis Diagram

⑭

Configuration and Layout

Front View

LAN1 LED
LAN2 LED
Error LED
USB2.0

HDD LED
RESET
Power Switch

Rear View

PCIe

Power 1 — 1
Power 2 — 2   I/O

⑮

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

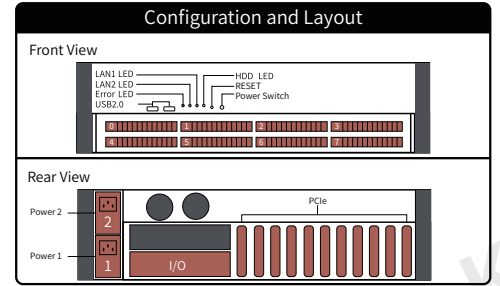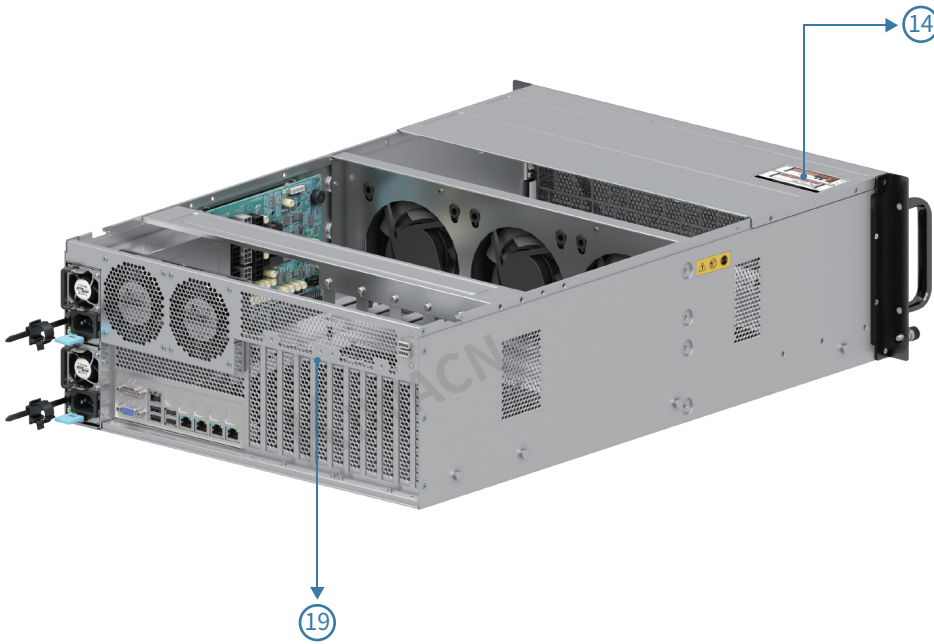Notice: Do not place liquids, handle with care

⑭ Chassis Layout Diagram Sticker

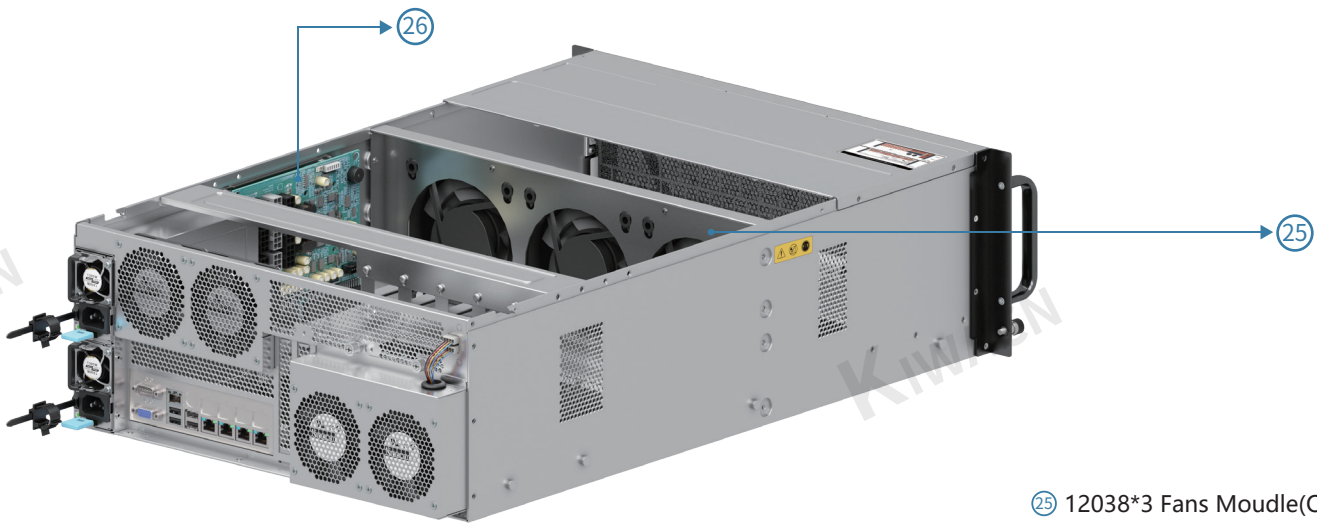⑮ Standard 8 PCIe Expansion Slots

⑳

⑧ 1+1 Redundant(Optional)

1300W
MODEL

1300W
MODEL

⑳
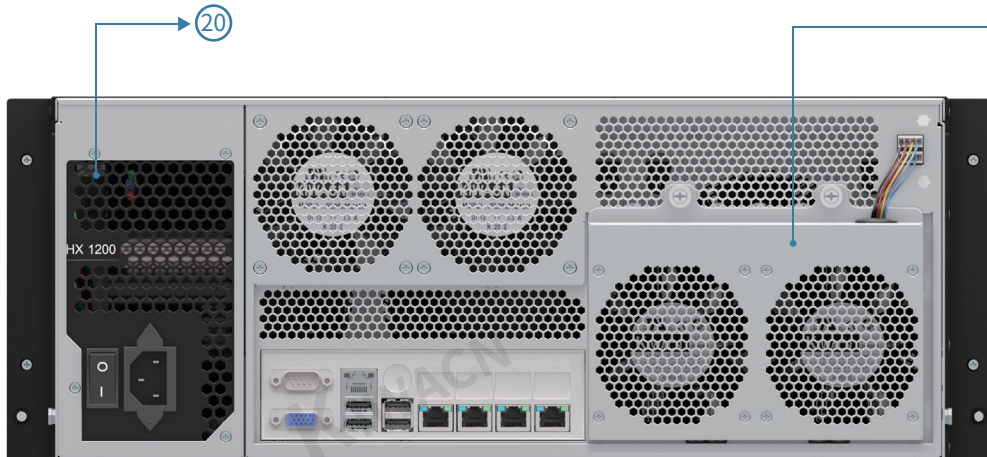
⑳ ATX Power Supply(Optional)
㉔ Rear Fan Module(Optional)

㉔

HX 1200

⑭

Configuration and Layout

Front View

LAN1 LED — HDD LED
LAN2 LED — RESET
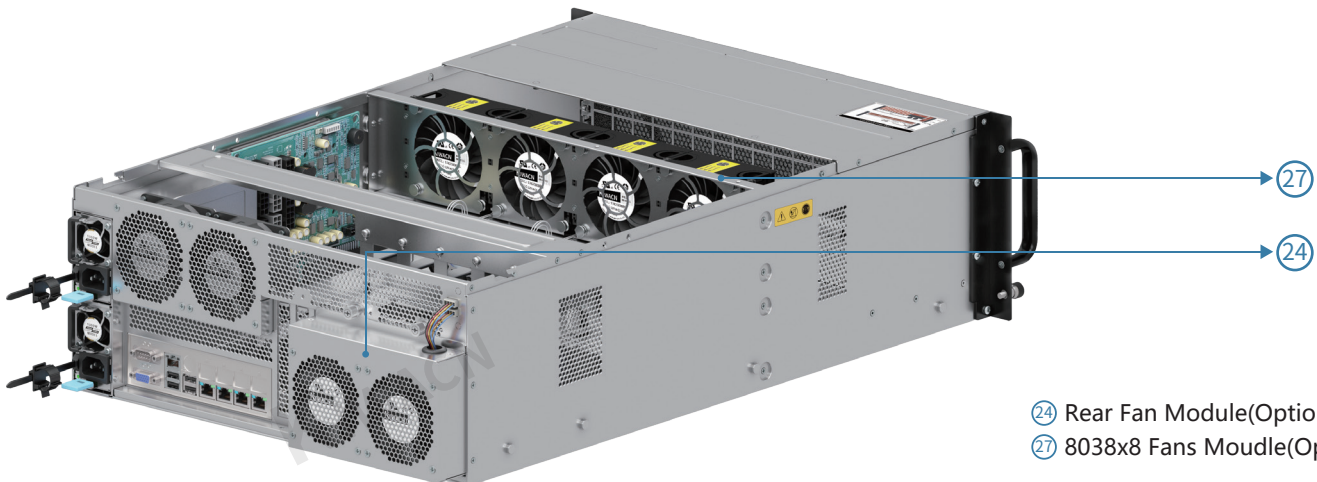Error LED — Power Switch
USB2.0

Rear View

Power 2 — 2
Power 1 — 1
PCIe
I/O

⑭ Chassis Layout Diagram Sticker

⑲ Standard 11 PCIe Expansion Slots

⑲

㉖

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)
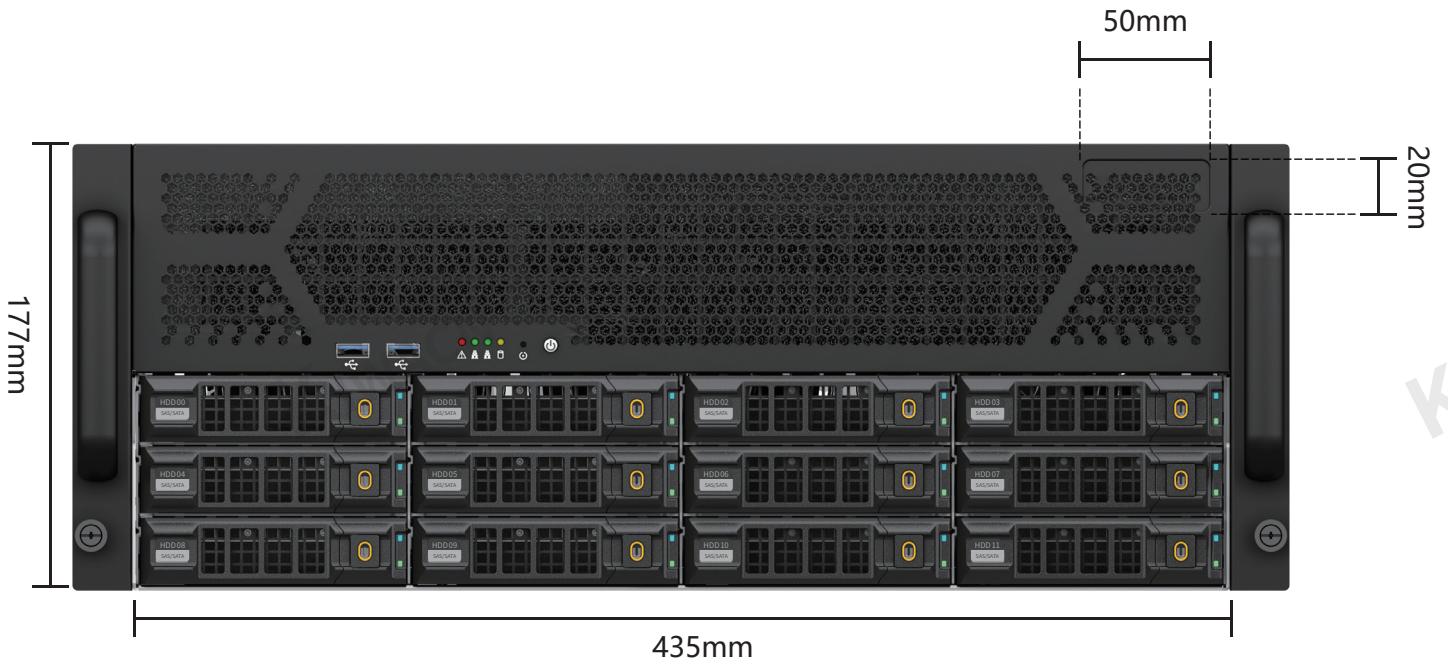
2.1.2 Server Chassis Images
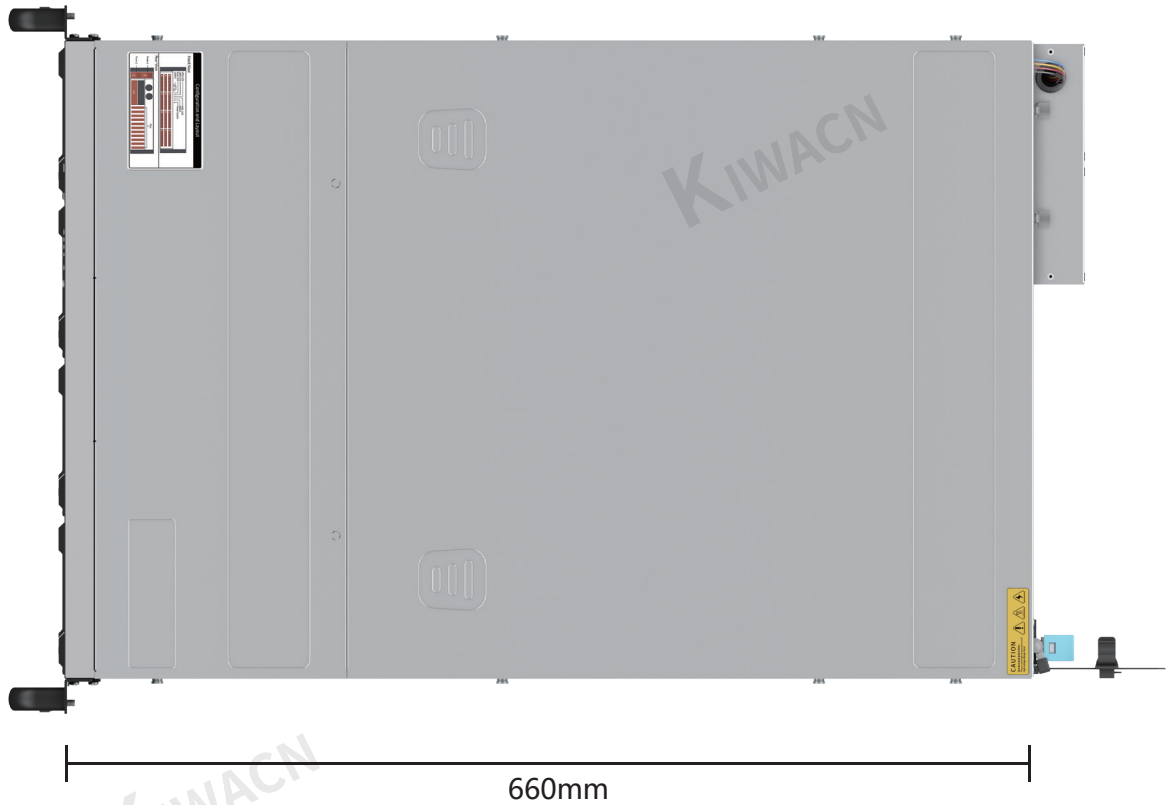
Front View

45° Side View

45° Rear View

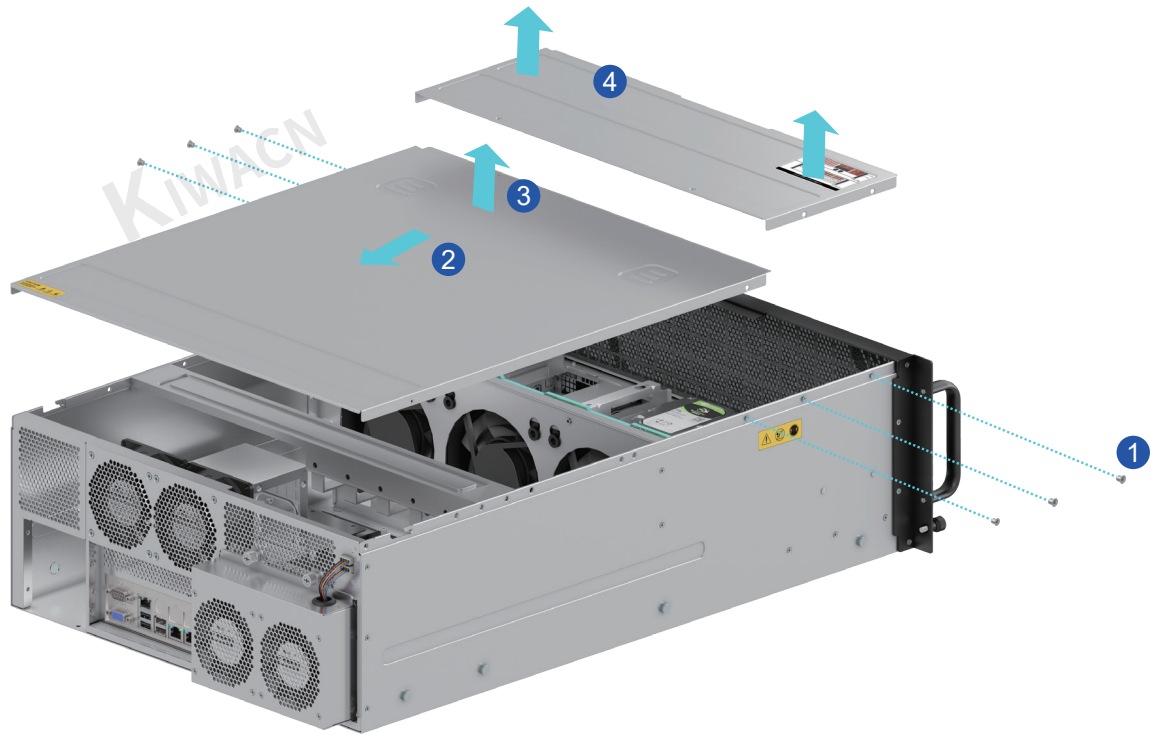## 2.1.3 Server Dimensions

Front View (Dimensions)

Top View (Dimensions)

Chapter 3   Product Loading and Unloading

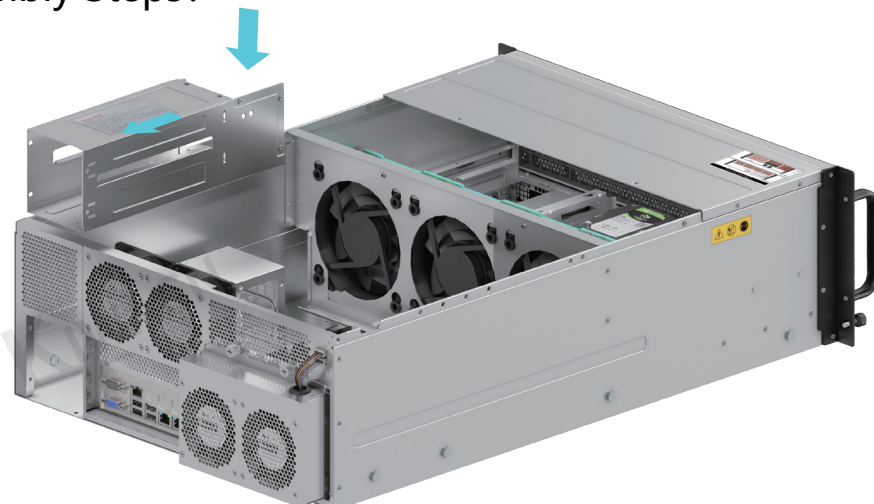## 3.1 Installation of Optical Drive

3.1.1 Steps of Installing the Optical Drive：

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.

## 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.
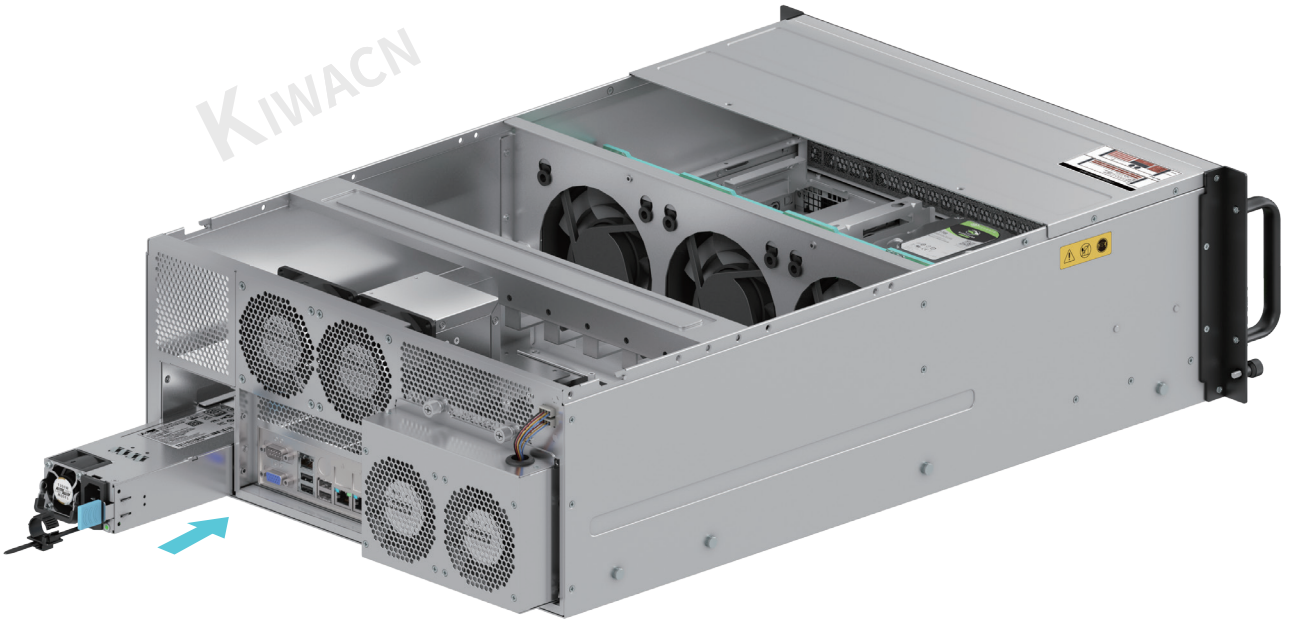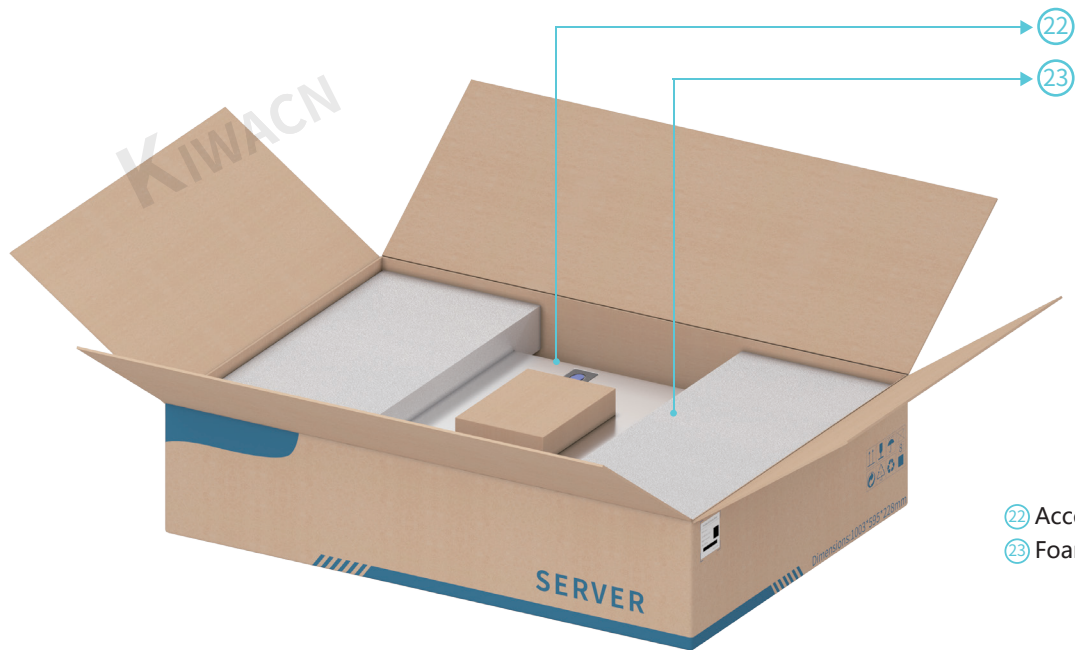

Insert power supply modules 1 and 2 into the power supply frame respectively
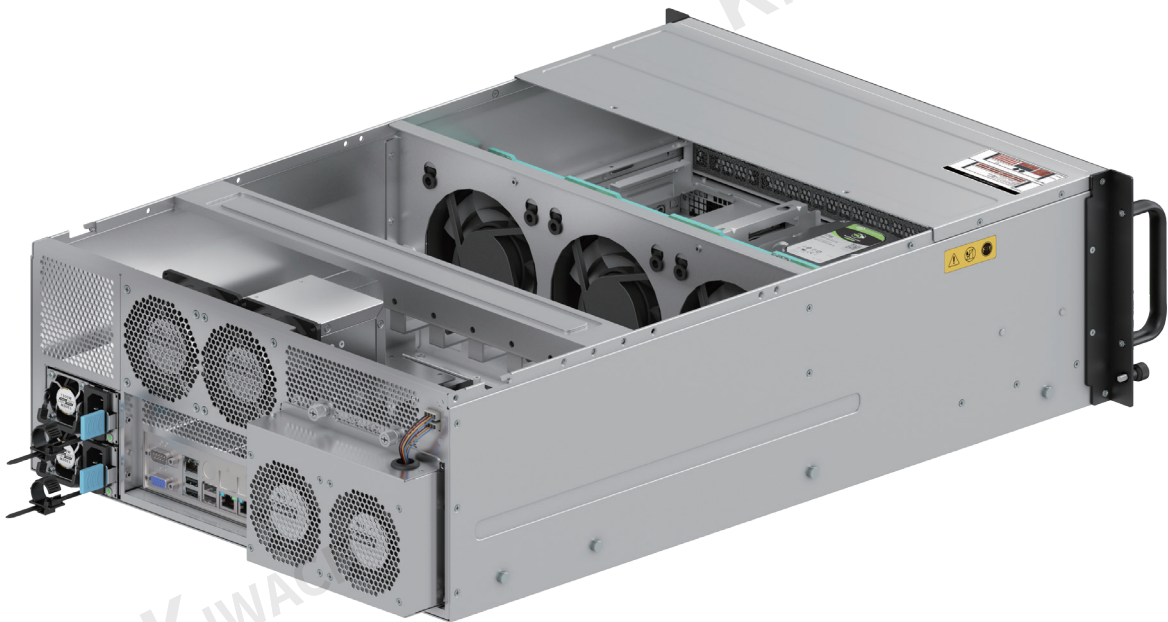
View of Installed Power Supply Unit

Chapter 4　Product Loading

4.1 Product Packaging

22 Accessory Box
23 Foam
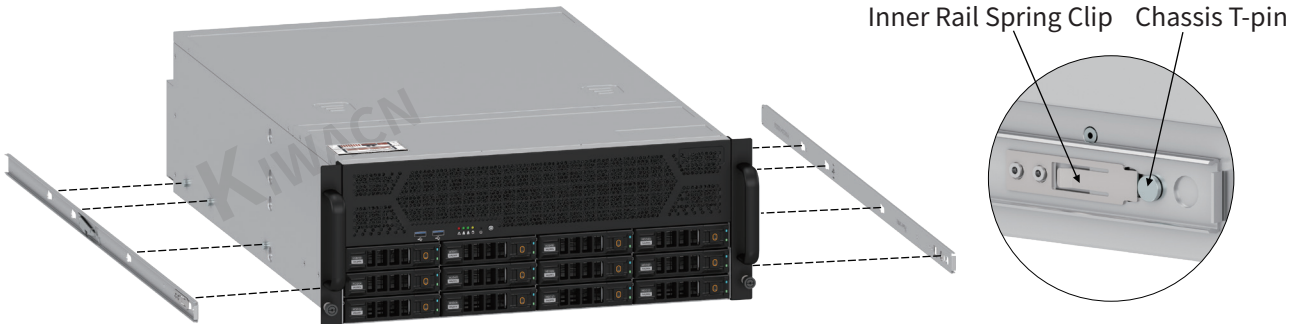
Place it into the suitcase

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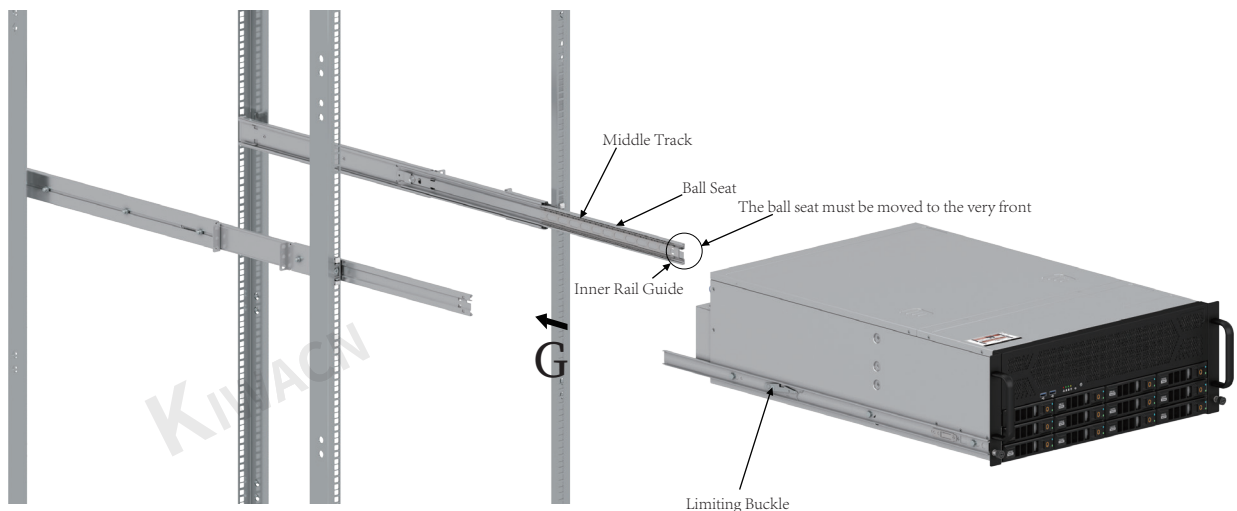
Note: Please make sure to insert horizontally in this direction. Otherwise, it may damage the ball seats and cause the slides to not function properly.
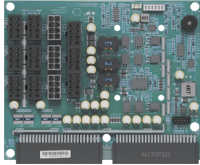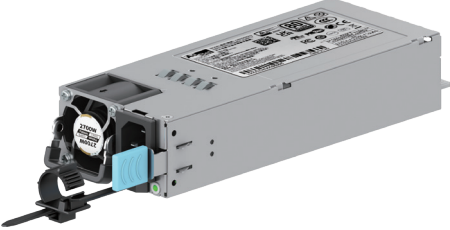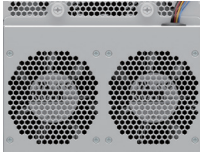
Chapter 6 Accessory Name and Part Number

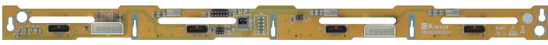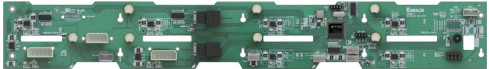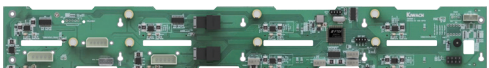## 6.1 Accessories and Material Numbers(Parts Box P/N:0201070009)

No.	Part No.	Name	Photograph	Quantity
01	P/N: 0305010001	2.5-inch hard drive screw (Compatible with 3.5 hard drive bay)		104
02	P/N:0305010031	3.5inch hard drive screws		96
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:0304090026	NVME cable (8654 4i to 8i)	
06	P/N:0201040016	rear cooling fans moudle	
07	P/N:0302060013	12GB Expander Backplane	
08	P/N:0302060031	4bays three models (nvme/u.2/12GB backplane)	
09	P/N:0302060026	4bays 12BG backplane	
10	P/N:0201120028	8bays three models (nvme/u.2/12GB backplane)	
11	P/N:0201120027	8bays 12BG backplane	