



## Lenovo 42U and 48U Heavy Duty Rack Cabinets

### Product Guide

Lenovo Heavy Duty Rack Cabinets are industry-standard 19-inch datacenter cabinets that are designed for high performance and high availability server and storage environments. They are optimized to help maximize floor space utilization, expedite installation, simplify cable management, and increase accessibility for improved serviceability while providing market leading configuration flexibility.

The rack cabinets are available in both 42U and 48U rack units heights designed to affordably, safely, and securely handle shipping fully loaded configurations up to 3500 lb (1588 kg) and 4000 lb (1814 kg) respectively. This enables you to receive your most capable and highest performing Lenovo solutions fully installed and integrated in the rack and ready to instantly deploy into your data center.



Figure 1. Lenovo 42U and 48U Heavy Duty Rack Cabinets in Pearl-White and Onyx-Black

### Did you know?

Lenovo Heavy Duty Rack Cabinets support a variety of Lenovo Neptune™ liquid cooling solutions. You can equip them with passive Rear Door Heat Exchangers to remove up to 35kW (42U) and 45kW (48U) into 16°C cold water at 25°C ambient temperature or go up to 50°C hot-water cooling when integrating Lenovo ThinkSystem SD650 V2 and ThinkSystem SD650-N V2 for leading performance density.

## Key features

The features of the Heavy Duty Rack Cabinets include:

- Designed for high performance and high availability environments
  - 600mm x 1200mm industry standard footprint both in 42U and in 48U EIA capacity.
  - Four easily adjustable leveling pads ensure stability and prevent rolling on casters.
  - Compliance with the EIA-310-E industry standard for 19-inch, type A rack cabinets.
  - Lockable doors and side panels provide a more secure environment for equipment and data.
- Highly customizable to your environment and preferences
  - Choice of beautiful Onyx (black) and Pearl (white) color for the most stunning datacenters in the world.
  - Choice of perforated rear door for ambient air cooling or Rear Door Heat Exchanger for room neutral liquid cooling.
  - Choice of side panels for standalone or isolated use-cases or side-by-side in row-configuration.
  - Choice of extension kits for the front to support thermally optimal and easily serviceable cabling and the rear to provide additional space for manifold or 0U components.
- Supporting the densest and most component-rich solutions
  - Support shipping ready for instant deployment fully integrated solutions up to 4000 lb (1814 kg).
  - Robust frame, mounting rails, and shock re-usable packaging to protect the heaviest loads in transit.
  - Integrated outriggers for dynamic tilt stability and safety at maximum loads.
  - Supports Lenovo Neptune Direct-Water Cooled solutions with rack level manifolds.
- Provides full configurability for all the power you need
  - Up to six (42U) or eight (48U) sidewall compartments to support installation of 1U PDUs without unnecessarily taking up valuable rack space.
  - Up to four mounting points for 0U PDUs conserves valuable EIA space for IT equipment, simplifies cable management, reduces installation time and increases accessibility.

## Components and connectors

The Heavy Duty Rack Cabinets are delivered on a reusable shock-resistant pallet ready for transport. The following figure shows the features of the Heavy Duty Rack Cabinets including the outriggers that aid the stability of the rack during movement, especially when the racks are fully loaded.

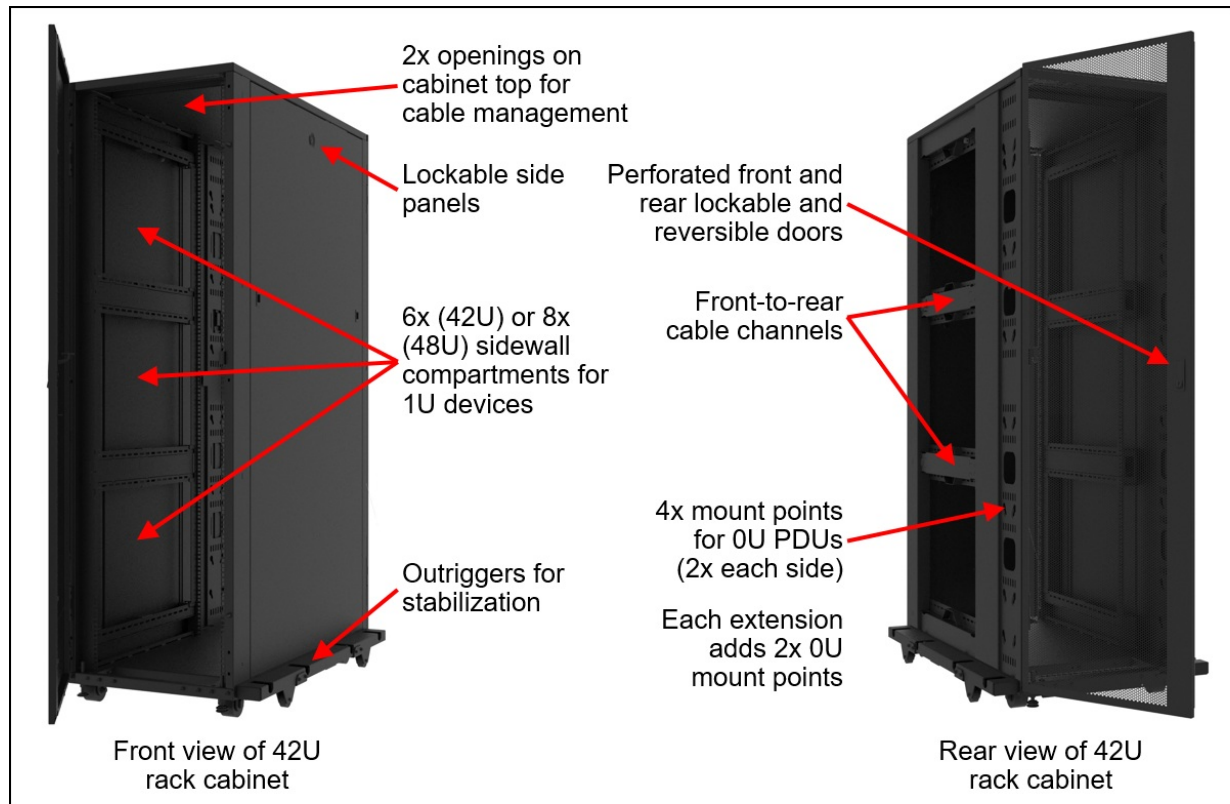


Figure 2. Front and rear views of the Heavy Duty Rack Cabinets

## Standard specifications

The following table compares the specifications of the racks.

Table 1. Standard specifications

Description	42U Rack Cabinet	48U Rack Cabinet
Machine types (general business / LeSI)	7D6D / 1410	7D6E / 1410
Can be shipped with servers installed (ship loadable)	Yes	Yes
Rack mount flange hole type	Square	Square
EIA Capacity	42U	48U
Optional rack extensions (adds 180mm depth)	2 (1 front, 1 rear) With RDHX installed, only 1x front supported	2 (Front and Rear) With RDHX installed, only 1x front supported
Sidewall compartments	6	8
0U PDU mounting points	4 6 with rear rack extension	4 6 with rear rack extension
Removable lockable reversible front and rear doors	Yes	Yes
Optional Rear Door Heat Exchanger (RDHX)	Yes	Yes
Removable lockable side panels	Yes	Yes
Height	2011 mm (79.2 in)	2277 mm (89.6 in)
Width (without outriggers)	600 mm (23.6 in)	600 mm (23.6 in)
Depth (without extensions)	1200 mm (47.2 in)	1200 mm (47.2 in)
Rack weight (empty)	248 kg (547 lb)	264 kg (582 lb)
Static/dynamic load capacity	1588 kg (3500 lb)	1814 kg (4000 lb)

For additional dimensions and weights, see the [Physical specifications](#) section.

## Models

Models of the Heavy Duty Rack Cabinets can be configured by using the Lenovo Data Center Solution Configurator (DCSC).

Configure-to-order (CTO) models are used to create models with factory-integrated server customizations. For CTO models, three base machine types are available for the Heavy Duty Rack Cabinet as listed in the following table, 7D6D, 7D6E and 1410:

- The 7D6D (42U) and 7D6E (48U) base machine types are for general business and is selectable by choosing General Purpose or HPC & AI ThinkSystem Hardware mode in DCSC.
- The 1410 base machine type is intended for Lenovo Scalable Infrastructure (LeSI) configurations and is enabled using the HPC & AI LeSI Solutions mode in DCSC. 1410 configurations can also be built using System x and Cluster Solutions Configurator (x-config).

The following table lists the base CTO models of the Heavy Duty Rack Cabinet.

Table 2. CTO base models

Base mode	Feature Code	Description
General business models		
7D6DCTO1WW	BHC3	Lenovo ThinkSystem 42U Onyx Heavy Duty Rack Cabinet
7D6DCTO2WW	BJ5V	Lenovo ThinkSystem 42U Pearl Heavy Duty Rack Cabinet
7D6ECTO1WW	BHCG	Lenovo ThinkSystem 48U Onyx Heavy Duty Rack Cabinet
7D6ECTO2WW	BJ63	Lenovo ThinkSystem 48U Pearl Heavy Duty Rack Cabinet
Lenovo Scalable Infrastructure models*		
1410-O42	BHC4	Lenovo EveryScale 42U Onyx Heavy Duty Rack Cabinet
1410-P42	BJ5W	Lenovo EveryScale 42U Pearl Heavy Duty Rack Cabinet
1410-O48	BHCH	Lenovo EveryScale 48U Onyx Heavy Duty Rack Cabinet
1410-P48	BJ64	Lenovo EveryScale 48U Pearl Heavy Duty Rack Cabinet

\* Lenovo EveryScale models are only available through [Lenovo Scalable Infrastructure](#) enabling fully integrated High Performance Computing solutions with solution-level interoperability support.

The following table lists the pre-configured models of the Heavy Duty Rack Cabinet. Listed in the table are standalone rack cabinets as well as rack cabinets without side panels that are intended to be attached to an existing rack cabinet as an expansion cabinet.

Table 3. Preconfigured models

Part number	Description
Primary Rack Cabinets (standalone rack cabinets)	
7D6DA007WW	Lenovo ThinkSystem 42U Onyx Primary Heavy Duty Rack Cabinet
7D6DA008WW	Lenovo ThinkSystem 42U Pearl Primary Heavy Duty Rack Cabinet
7D6EA009WW	Lenovo ThinkSystem 48U Onyx Primary Heavy Duty Rack Cabinet
7D6EA00AWW	Lenovo ThinkSystem 48U Pearl Primary Heavy Duty Rack Cabinet
Expansion Rack Cabinets (rack cabinets without side panels)	
7D6D0001WW	Lenovo ThinkSystem 42U Onyx Expansion Heavy Duty Rack Cabinet
7D6DA000WW	Lenovo ThinkSystem 42U Pearl Expansion Heavy Duty Rack Cabinet
7D6EA000WW	Lenovo ThinkSystem 48U Onyx Expansion Heavy Duty Rack Cabinet
7D6EA001WW	Lenovo ThinkSystem 48U Pearl Expansion Heavy Duty Rack Cabinet

## Configuration options

The Heavy Duty Rack Cabinets can be customized for your preferences and specific use case or deployment scenario.

- [180mm Standard Extensions](#)
- [180mm Advanced Extensions](#)
- [85mm Slim Extensions](#)
- [100mm Slim Extensions for RDHX](#)
- [Rear doors](#)
- [Side Panels](#)
- [Cable management options](#)

### 180mm Standard Extensions

The 1200mm standard depth of the rack cabinets can be extended by 180mm both in the front and the rear. The front extension can provide additional space for optimal front cabling, which can be beneficial both from a servicing point of view and from a thermal point of view. The rear extension can provide additional space for additional 0U PDUs (one on each side) or deeper than usual systems within the rack cabinet.

**Use with RDHX:** With the Standard Extension Kit, if a Rear Door Heat Exchanger is installed, then the extension kit can only be used at the front of the rack, not the rear. If a rear extension is required with RDHX, use the [180mm Advanced Extension Kit](#).

Ordering information is listed in the following table.

Table 4. 180mm Standard Extensions ordering information

Part number	Feature code	Description	Maximum supported
42U extension options			
4M17A61254	BHC9	ThinkSystem 42U Onyx 180mm Standard Rack Extension Kit	2†
4M17A61290	BJ62	ThinkSystem 42U Pearl 180mm Standard Rack Extension Kit	2†
48U extension options			
4M17A61255	BHCP	ThinkSystem 48U Onyx 180mm Standard Rack Extension Kit	2†
4M17A61291	BJ6A	ThinkSystem 48U Pearl 180mm Standard Rack Extension Kit	2†
Extension location (for CTO orders)			
None	BJ2N	Front Installation of 180mm Extension Kit*	1
None	BJ2M	Rear Installation of 180mm Extension Kit	1

† Only 1 extension, installed at the front, is supported with racks that have a Rear Door Heat Exchanger (RDHX) attached

\* One Extension Kit and the Front installation must be selected for front-cabled systems.

All extensions come with four (42U) or five (48U) 178mm by 89mm openings to allow for inter-rack cabling without having to leave the rack through the top to overhead trays or through the bottom into a raised floor. Each side has eight hook-and-loop straps to aid with cable management. The following figure shows the contents of the rack extension part numbers. As well as the two sides [1] and [2], the kit includes one top cover [3], two front covers [4] and necessary screws to attach the extension to the rack cabinet [5], [6] and [7].

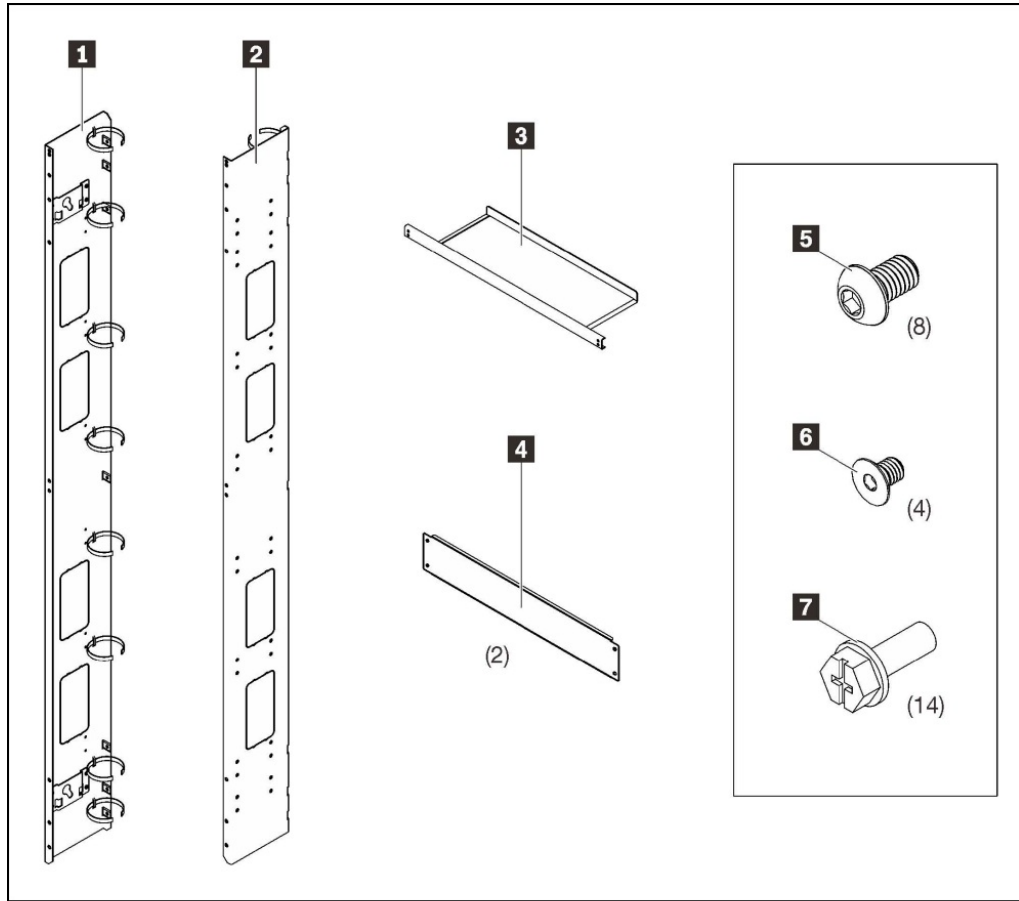


Figure 3. Contents of 180mm Advanced Rack Extension Kit (42U extension shown)

### 180mm Advanced Extensions

An alternative to the Standard Extensions listed in the previous section are the 180mm Advanced Extensions, which are also supported front and rear. The front extension can provide additional space for optimal front cabling, which can be beneficial both from a servicing point of view and from a thermal point of view. The rear extension can provide additional space for additional 0U PDUs (two on each side), or water manifolds, or deeper than usual systems, within the rack cabinet.

Key differences compared to the Standard Extension Kit are listed in the following table.

Table 5. Differences between Standard and Advanced Extension Kits

Feature	Standard Extension	Advanced Extension
0U support	1x 0U PDU on each side	2x 0U PDU on each side
Horizontally mounted cable brackets	None	3x each side
Openings	4x each side	5x (42U) or 6x (48U) openings, with removable fillers
Hook-and-loop straps	8x per side	22x (42U) or 24x (48U) per side
RDHX support with rear extension	No	Yes (requires Rear Door Heat Exchanger Support Kit, 4XF7A99796)
Support for water manifolds	No	Yes

Ordering information is listed in the following table.

Table 6. 180mm Advanced Extensions ordering information

Part number	Feature code	Description	Maximum supported
42U extension options			
4XF7A99747	C4ZA	ThinkSystem 42U Onyx 180mm Advanced Rack Extension Kit	2
4XF7A99749	C4YY	ThinkSystem 42U Pearl 180mm Advanced Rack Extension Kit	2
48U extension options			
4XF7A99748	C4YZ	ThinkSystem 48U Onyx 180mm Advanced Rack Extension Kit	2
4XF7A99750	C4ZB	ThinkSystem 48U Pearl 180mm Advanced Rack Extension Kit	2
RDHX Kit			
4XF7A99796	C50L	Rear Door Heat Exchanger Support Kit	1

All extensions come with five (42U) or six (48U) openings, with removable fillers, to allow for inter-rack cabling without having to leave the rack through the top to overhead trays or through the bottom into a raised floor. Each side has 22 (42U) or 24 (48U) hook-and-loop straps to aid with cable management. The following figure shows the contents of the rack extension part numbers. As well as the two sides [1] and [2], the kit includes one top cover [3], and three horizontally mounted cable brackets [4], and necessary screws to attach the extension to the rack cabinet [5] to [9], and three grounding wires [10].



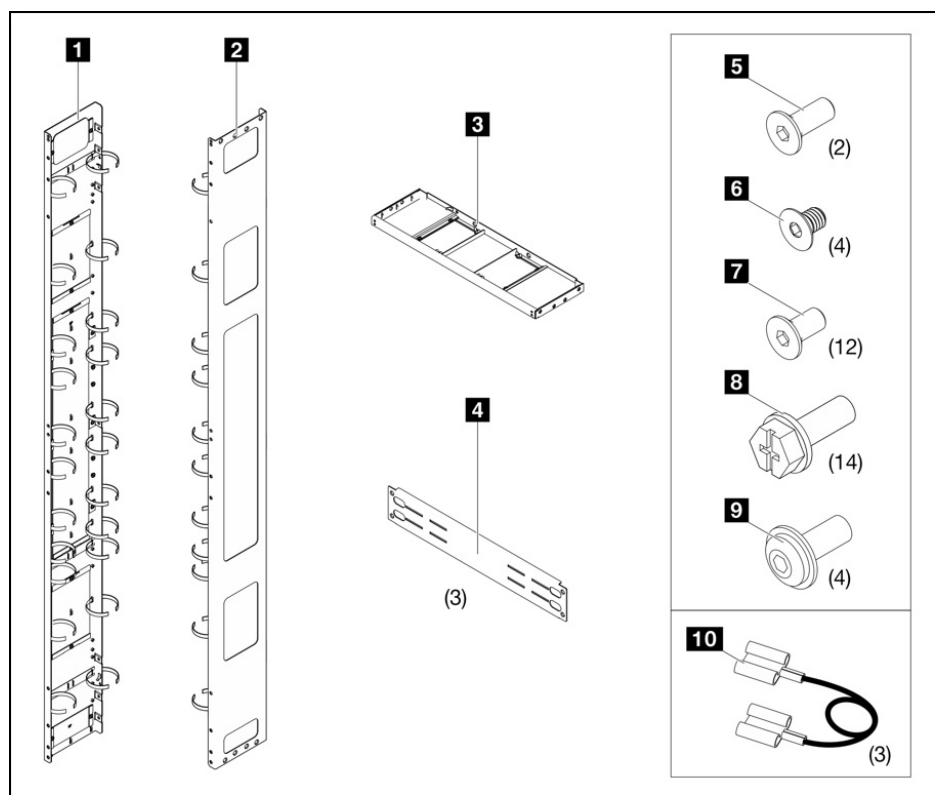


Figure 4. 180mm Advanced Rack Extensions

For more information, see the following Lenovo Pubs pages:

42U kit: [https://pubs.lenovo.com/hdc Rack Cabinet/options\\_42u\\_advanced\\_extension\\_module](https://pubs.lenovo.com/hdc Rack Cabinet/options_42u_advanced_extension_module)

48U kit: [https://pubs.lenovo.com/hdc Rack Cabinet/options\\_48u\\_advanced\\_extension\\_module](https://pubs.lenovo.com/hdc Rack Cabinet/options_48u_advanced_extension_module)

The Rear Door Heat Exchanger Support Kit is used to attach the RDHX to a rear-mounted 180mm Advanced Rack Extension. It contains the following components:

- RDHX upper hinge
- RDHX bottom hinge
- RDHX Door Latch

For more information, see the following Lenovo Pubs page:

[https://pubs.lenovo.com/hdc Rack Cabinet/options\\_48u\\_rdhx](https://pubs.lenovo.com/hdc Rack Cabinet/options_48u_rdhx)

### 85mm Slim Extensions

As an alternative to the 180mm rack extensions, the 42U Onyx racks also support an 85mm slim extension. The slim extension can be installed at the front or rear of the cabinet (or both front and rear).

**42U racks only:** The 85mm slim extension is only supported in the 42U rack cabinets, and only comes in Onyx (black) color.

Table 7. 85mm Slim Extensions

Part number	Feature code	Description
Slim extension - for 7D6DCTO1WW and 1410-O42 only		
00YE456	AUEE	ThinkSystem 42U Onyx Slim Rack Extension, 85mm Depth
Extension location (for CTO orders)		
CTO only	BY03	Front Installation of 85mm Extension Kit
CTO only	BY04	Rear Installation of 85mm Extension Kit

The 85mm Slim Extension does not support 0U PDUs. If 0U PDUs are to be installed, they will need to be installed on the rack cabinet, not the extension. The use of the Rear Door Heat Exchanger (RDHX) is also not supported with the 85mm Slim Extension. For RDHX support, use the 100mm Slim Extension as described in the next section.

### 100mm Slim Extensions for RDHX

As an alternative to the 180mm rack extension, the 42U Onyx rack also support an 100mm slim extension at the rear of the cabinet with the Rear Door Heat Exchanger (RDHX) attached. The 100mm Slim Extension is only supported on the rear of the cabinet.

**42U racks only:** This 100mm rear slim extension is only supported in the 42U rack cabinets, and only comes in Onyx (black) color.

Table 8. 100mm Slim Extensions for RDHX

Part number	Feature code	Description
Slim extension - for 7D6DCTO1WW and 1410-O42 only		
CTO only	BWCA	ThinkSystem 42U Onyx Slim Rear Rack Extension for RDHX, 100mm Depth
Extension location (for CTO orders)		
CTO only	BY05	Rear Installation of 100mm Extension Kit for RDHX

The 100mm Slim Extension does not support 0U PDUs. If 0U PDUs are to be installed, they will need to be installed on the rack cabinet, not the extension.

### Rear doors

Depending on the choice of cooling and preference of aesthetics the Heavy Duty Rack Cabinet can be ordered with a perforated rear door for ambient air cooling, a passive Rear Door Heat Exchanger leveraging Lenovo Neptune technology for liquid cooling or no rear door at all to, for example, show case a beautiful cabling job.

Ordering information is listed in the following table.

Table 9. Rear doors

Part number	Feature code	Description	Maximum supported
42U rear door options			
4M17A61319	BJPA	ThinkSystem 42U Onyx Heavy Duty Rack Rear Door	1
4M17A61320	BJ5Z	ThinkSystem 42U Pearl Heavy Duty Rack Rear Door	1
4M17A61292	BJ2K	Rear Door Heat Exchanger for 42U Rack	1
48U rear door options			
4M17A61321	BHCL	ThinkSystem 48U Onyx Heavy Duty Rack Rear Door	1
4M17A61322	BJ67	ThinkSystem 48U Pearl Heavy Duty Rack Rear Door	1
4M17A61256	BHCN	Rear Door Heat Exchanger for 48U Rack	1
Additional options			
4M27A13685	A4ZA	Rear Door Heat Exchanger Bleed Tool (air-purging tool)	Not applicable

The following figure shows the standard rear door and the Rear Door Heat Exchanger, installed in 42U rack cabinets.



Figure 5. Standard rear door and the Rear Door Heat Exchanger

## Side Panels

The Heavy Duty Rack Cabinets can be configured with and without side panels or even just one with the choice of side, to map exactly to your requirements. Choose both side panels if the rack cabinet will be placed standalone or you want to isolate airflow, choose one side panel with left or right placement for racks that are at the end of a rack row and leave them off for racks that are placed inside the row.

Attachment brackets to connect and secure adjacent racks together are included with all racks.

Table 10. Side Panels

Part number	Feature code	Description	Maximum supported
42U side panel options			
4M17A61323	BHC7	ThinkSystem 42U Onyx Heavy Duty Rack Side Panel	2
4M17A61324	BJ60	ThinkSystem 42U Pearl Heavy Duty Rack Side Panel	2
48U side panel options			
4M17A61325	BHCM	ThinkSystem 48U Onyx Heavy Duty Rack Side Panel	2
4M17A61326	BJ68	ThinkSystem 48U Pearl Heavy Duty Rack Side Panel	2
Additional options			
None	BJPB	Side Panel Left Installation*	1
None	BJPC	Side Panel Right Installation*	1

\* Left and Right are as seen from the rear of the cabinet looking towards the front of the cabinet, also referred to as “proper left” and “proper right”.

## Cable management options

Proper cable management is a crucial part of a rack design to allow for optimal airflow and also easy serviceability of the populated rack cabinet. For that reason, the Heavy Duty Rack Cabinet comes by default equipped with rear cable management anchor points for a clean and beautiful cabling.

Additionally there is a choice for front cable management brackets to provide additional anchor points for front-cabled systems, and cable management brackets for use in the rear when 0U PDUs are installed.

Table 11. Cable management options

Part number	Feature code	Description	Maximum supported
Default cable management options			
00Y3026	A4WW	Cable Installation Tool for Racks	Not Applicable
4M17A61327	BJPD	21U Front Cable Management Bracket	2*
48U additional cable management options			
4M17A61328	BJ2L	6U Front Cable Management Bracket	1*
Other cable management options			
00Y3011	A4WU	1U Rack Pass Through Bracket	Not Applicable
CTO only	BNVL	42U Rear Cable Management Bracket Kit for 0U PDUs (contains 6 brackets)	1**
CTO only	BNVM	48U Rear Cable Management Bracket Kit for 0U PDUs (contains 8 brackets)	1**

\* The Front Cable Management Brackets must be selected if front-cabled systems are configured in the rack cabinet.

\*\* The Rear Cable Management Bracket must be selected if 0U PDUs are used.

## Power Distribution Units

The Heavy Duty Rack Cabinets support both 0U power distribution units (PDUs) mounted vertically in the rear as well as 1U PDUs that can be installed either within the horizontal rack space or the vertical rack side pockets.

The following table lists the power distribution units (PDUs) that are offered by Lenovo.

Table 12. Power distribution units

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
<b>0U Basic PDUs</b>															
4PU7A93176	C0QH	0U 36 C13 and 6 C19 Basic 32A 1 Phase PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93169	C0DA	0U 36 C13 and 6 C19 Basic 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93177	C0QJ	0U 24 C13/C15 and 24 C13/C15/C19 Basic 32A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>0U Switched and Monitored PDUs</b>															
4PU7A93181	C0QN	0U 21 C13/C15 and 21 C13/C15/C19 Switched and Monitored 48A 3 Phase Delta PDU v2 (60A derated)	N	Y	N	N	N	N	N	Y	N	Y	N	Y	N
4PU7A93178	C0QK	0U 20 C13 and 4 C19 Switched and Monitored 32A 1 Phase PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93171	C0D8	0U 20 C13 and 4 C19 Switched and Monitored 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93182	C0QP	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 63A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A93175	C0CS	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 63A 3 Phase WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93180	C0QM	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 32A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A93173	C0D6	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 32A 3 Phase WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93179	C0QL	0U 16 C13/C15 and 16 C13/C15/C19 Switched and Monitored 24A 1 Phase PDU v2 (30A derated)	N	Y	N	N	N	N	N	Y	N	Y	N	Y	N
<b>1U Switched and Monitored PDUs</b>															
4PU7A90808	C0D4	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 ETL	N	N	N	N	N	N	N	Y	N	Y	Y	Y	N
4PU7A81117	BNDV	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - ETL	N	N	N	N	N	N	N	N	N	N	N	Y	N
4PU7A90809	C0DE	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 CE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
4PU7A90810	C0DD	1U 18 C19/C13 Switched and monitored 80A 3P Delta PDU V2	N	N	N	N	N	N	N	Y	N	Y	Y	Y	N
4PU7A90811	C0DC	1U 12 C19/C13 Switched and monitored 32A 3P WYE PDU V2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A90812	C0DB	1U 12 C19/C13 Switched and monitored 60A 3P Delta PDU V2	N	N	N	N	N	N	N	Y	N	Y	Y	Y	N
71763NU	6051	Ultra Density Enterprise C19/C13 PDU 60A/208V/3PH	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N
71762NX	6091	Ultra Density Enterprise C19/C13 PDU Module	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Line cords for 1U PDUs that ship without a line cord</b>															
40K9611	6504	DPI 32a Cord (IEC 309 3P+N+G)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9612	6502	DPI 32a Cord (IEC 309 P+N+G)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9613	6503	DPI 63a Cord (IEC 309 P+N+G)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9614	6500	DPI 30a Cord (NEMA L6-30P)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9615	6501	DPI 60a Cord (IEC 309 2P+G)	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N

For more information, see the Lenovo Press documents in the PDU category:  
<https://lenovopress.com/servers/options/pdu>

## Lenovo Neptune water-cooling components

Lenovo Heavy Duty Rack Cabinets support water infrastructure used to cool the major components of the servers installed. The components of the water-cooled solution are as follows:

- 38-port water manifold, installed in the rear of the rack cabinet  
The manifold provides quick-disconnect couplings that each server in the rack is connected to. Two 0U mounting points are required for the water manifolds, at the rear of the rack cabinet, one either side. Ordering information is in the table below.
- Coolant distribution unit (CDU), either in-rack or in-row:
  - In-rack CDUs are installed at the bottom of the rack cabinet. The supported in-rack CDU is the Lenovo Neptune DWC RM100 In-Rack CDU as described in the [RM100 In-Rack Coolant Distribution Unit](#) section.
  - In-row CDUs are separate cabinets that are typically installed at the end of a row of rack cabinets. Examples of suitable in-row CDUs include (but not limited to):
    - CoolTera FS400 310KW CDU
    - Vertiv Liebert XDU60 60KW CDU
- Hose kit to connect to the CDU to the manifold  
Ordering information is in the table below.

The following figure shows the water manifolds and in-rack CDU installed in either a 42U or 48U rack cabinet.

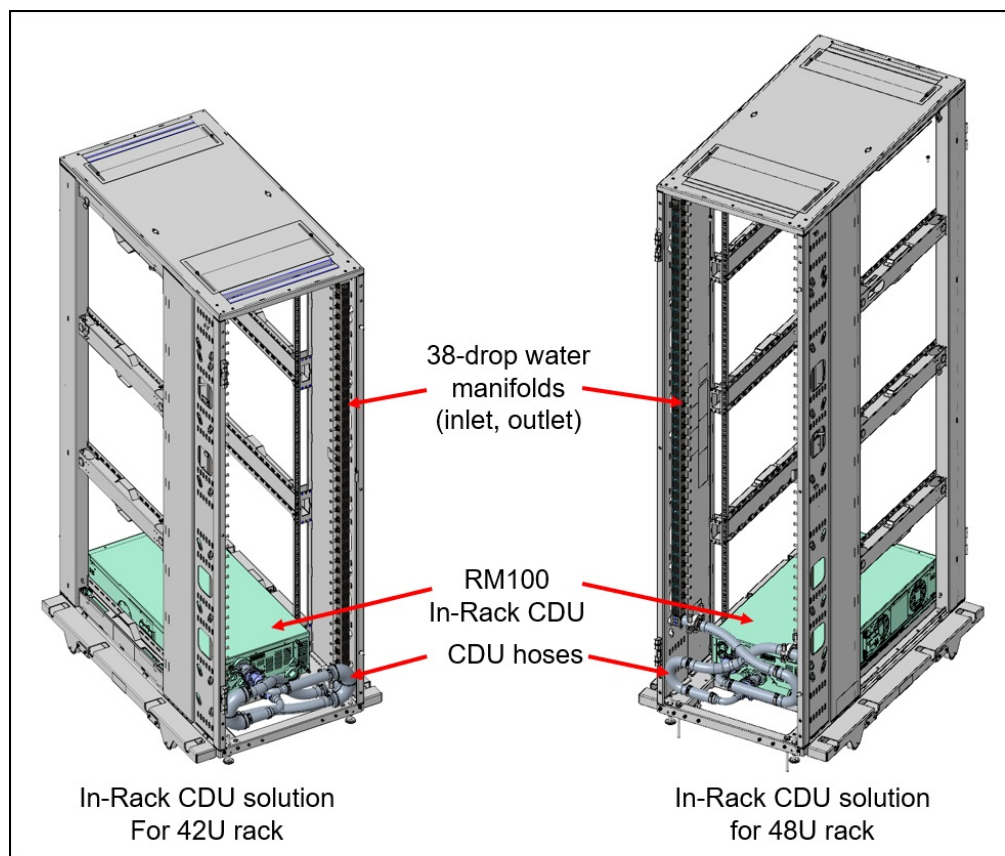


Figure 6. Water manifolds and connections for an in-rack CDU

Ordering information for the water manifold and hoses is listed in the following table.

Table 13. Water-cooling rack components ordering information

Part number	Feature code	Description
Manifold for 42U and 48U rack cabinet		
4XF7A90061	C5YW	ThinkSystem Neptune 38-Port Rack Manifold
Hoses to connect the manifold to an in-rack CDU		
4XF7A90232	C5YX	Connection Set, 38/45 Ports Manifold with in-rack CDU
4XF7A90233	C5YY	Connection Set, 38-Port Manifold with in-rack CDU for 48U Rack
Hoses to connect the manifold to an in-row CDU		
4XF7A90234	C5YZ	Hose Set, 1 inch EPDM, 1.3m, for Rack Manifold with in-row CDU
4XF7A90235	C5Z0	Hose Set, 1 inch EPDM, 2.3m, for Rack Manifold with in-row CDU

Configuration notes:

- This water connection solution described here cannot be used with the DW612S or N1380 enclosure as the water requirements are different.
- The hoses for in-row CDUs that are listed in the table above have Eaton FD83 quick-disconnect couplings

## RM100 In-Rack Coolant Distribution Unit

The RM100 In-Rack Coolant Distribution Unit (CDU) can provide 100kW cooling capacity within the rack cabinet. It is designed as a 4U high rack device installed at the bottom of the rack. The CDU is supported in the 42U and 48U Heavy Duty Rack Cabinets.

The following figure shows the RM100 CDU.



Figure 7. RM100 In-Rack Coolant Distribution Unit

The CDU can be ordered using the CTO process in the configurators using machine type 7DBL. The following table lists the base CTO model and base feature code.

Table 14. RM100 ordering information

CTO model	Base feature	Description
7DBLCTOLWW	BRL4	Lenovo Neptune DWC RM100 In-Rack CDU

For details and exact specification of the CDU, see the In-Rack CDU Operation & Maintenance Guide: [https://pubs.lenovo.com/hdc\\_rackcabinet/rm100\\_user\\_guide.pdf](https://pubs.lenovo.com/hdc_rackcabinet/rm100_user_guide.pdf)

**Professional Services:** The factory integration of the In-Rack CDU requires Lenovo Professional Services review and approval for warranty and associated extended services. Before ordering CDU and manifold, contact the Lenovo Professional Services team ([CDUsupport@lenovo.com](mailto:CDUsupport@lenovo.com)).

## RDHX performance

Expected performance of the 42U heat exchanger is illustrated in the following figure for a typical inlet air temperature of 27°C (80.6°F), with a fully populated rack, near uniform power dissipation, and a 30-40 kW heat load.



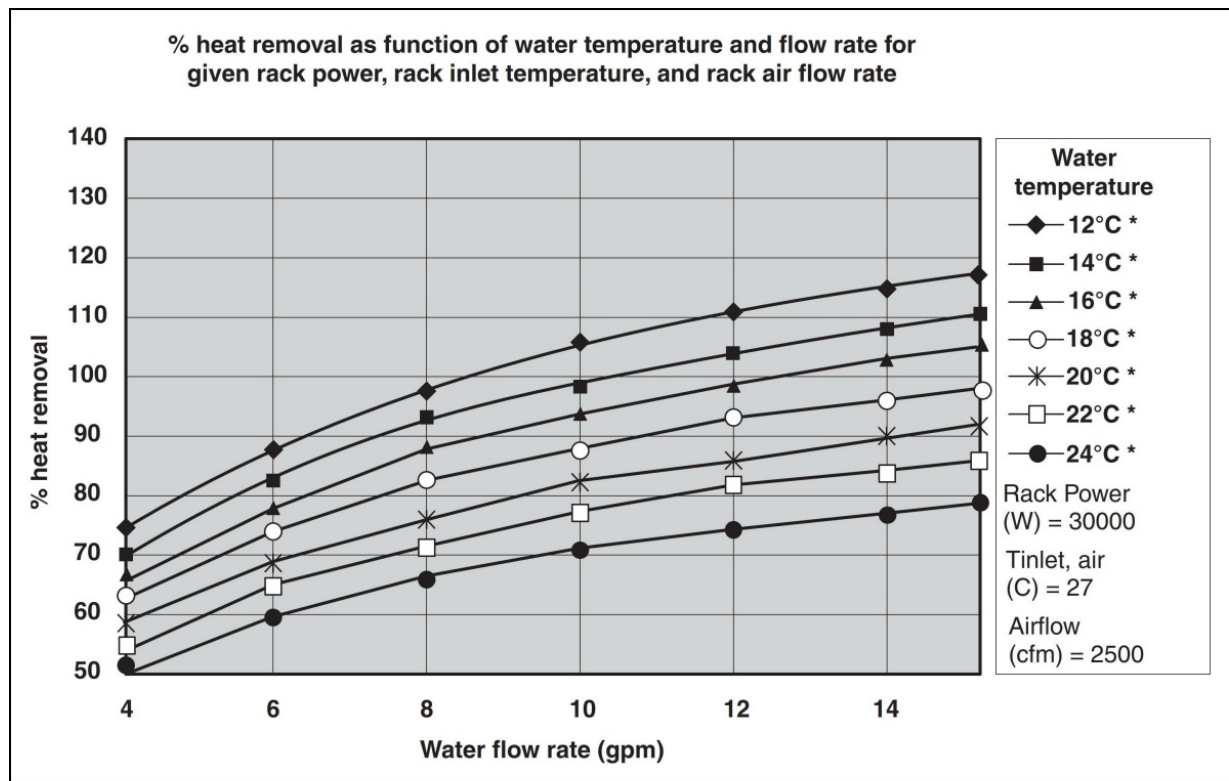


Figure 8. Typical performance of the 42U heat exchanger, 30 kW heat load

Performance data is shown in the following figure for a 20 kW heat load. Because of the lower heat load, a specific level of cooling can be achieved with warmer water, a lower flow rate, or both.

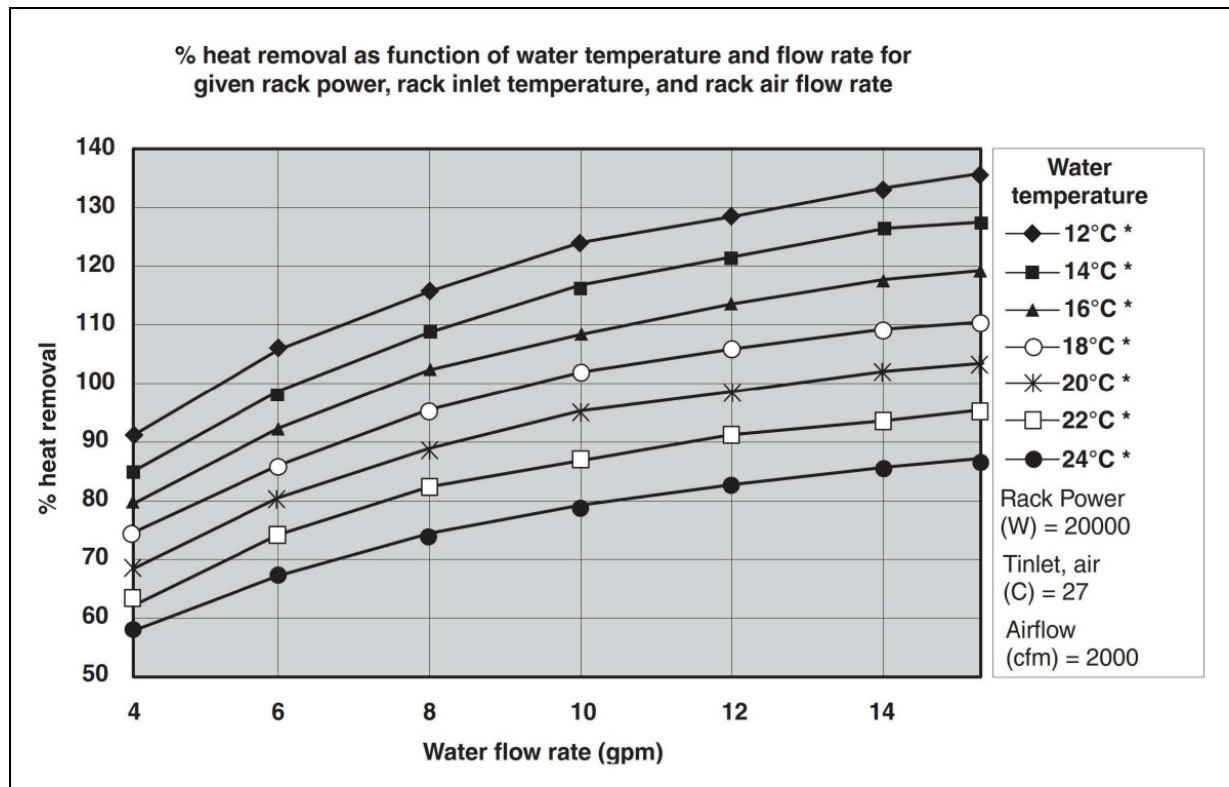


Figure 9. Typical performance of the 42U heat exchanger, 20 kW heat load

By selecting the correct water inlet temperature and water flow rate, you can achieve the necessary heat removal. A heat removal of 100% indicates that an amount of heat equivalent to that generated by the devices has been removed by the heat exchanger and the average air temperature leaving the heat exchanger is identical to that entering the rack (27°C /80.6°F in this example).

Heat removal in excess of 100% indicates that the heat exchanger not only removed all of the heat generated by the devices but further cooled the air so that the average air temperature leaving the rack is actually lower than that entering the rack.

A given water temperature may be used only if the system that is supplying the water is able to measure the room dew point and automatically adjust the water temperature accordingly. Otherwise, the water temperature must be above the maximum dew point that is allowed at that data center installation.

Customers should work with their Lenovo Sales Architects and Datacenter Infrastructure Specialists for an exact sizing for their project.

## Physical specifications

The following table lists the dimensions and weight of the rack cabinets.

Table 15. Physical specifications

Description	42U Rack Cabinet	48U Rack Cabinet
Cabinet dimensions		
Height	2011 mm (79.2 in)	2277 mm (89.6 in)
Width (without outriggers)	600 mm (23.6 in)	600 mm (23.6 in)
Width (with outriggers)	770 mm (30.3 in)	770 mm (30.3 in)
Depth (without extensions)	1200 mm (47.2 in)	1200 mm (47.2 in)
Depth (with 1 extension)	1380 mm (54.3 in)	1380 mm (54.3 in)
Depth (with 2 extensions)	1560 mm (61.4 in)	1560 mm (61.4 in)
Packaging dimensions		
Packaging height	2205 mm (86.1 in)	2472 mm (97.3 in)
Packaging width	1100 mm (43.3 in)	1100 mm (43.3 in)
Packaging depth	1760 mm (69.3 in)	1760 mm (69.3 in)
Weight		
Empty (Front Door only)	184 kg (406 lb)	191 kg (421 lb)
Rear Door	11 kg (24 lb)	12 kg (26 lb)
Outriggers	8 kg (18 lb)	8 kg (18 lb)
Stabilizer	7 kg (15 lb)	7 kg (15 lb)
<b>Empty Expansion Rack (without side panels)</b>	<b>202 kg (445 lb)</b>	<b>210 kg (463 lb)</b>
Side Panels	23 kg (51 lb)	27 kg (60 lb)
<b>Empty Primary Rack</b>	<b>248 kg (547 lb)</b>	<b>264 kg (582 lb)</b>
Maximum Load (Dynamic and Static)	1588 kg (3501 lb)	1814 kg (3999 lb)
Packaging	244 kg (538 lb)	251 kg (553 lb)
Anchor brackets	6 kg (13 lb)	6 kg (13 lb)
<b>Empty ship weight (with packaging)</b>	<b>498 kg (1098 lb)</b>	<b>521 kg (1148 lb)</b>
<b>Full Load ship weight (with packaging)</b>	<b>2086 kg (4599 lb)</b>	<b>2335 kg (5148 lb)</b>
Rear Door Heat Exchanger (empty)	39 kg (86 lb)	49 kg (108 lb)
Extension Kit	16 kg (35 lb)	18 kg (40 lb)
<b>Maximum empty weight (with RDHX and extension)</b>	<b>292 kg (644 lb)</b>	<b>319 kg (703 lb)</b>
Rear Door Heat Exchanger (filled)	48 kg (106 lb)	58 kg (128 lb)
<b>Maximum deployed weight</b>	<b>1829 kg (4032 lb)</b>	<b>2071 kg (4566 lb)</b>

The following image shows the location of the casters (wheels) in relation to the overall dimensions of the rack cabinet.

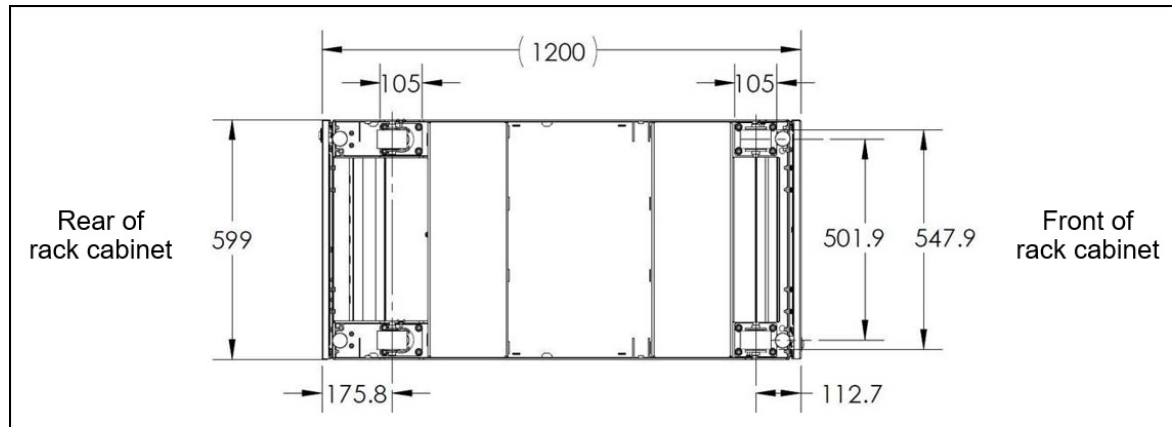


Figure 10. Location of the casters (distances in millimeters)

## Operating environment

The Heavy Duty Rack Cabinets have the following operating environment requirements:

### RDHX water requirements

The water requirements for the Rear Door Heat Exchanger is as follows:

- Water Temperature:
  - Above dewpoint
  - 18°C / 64.4°F for ASHRAE Class 1 Environment
  - 22°C / 71.6°F for ASHRAE Class 2 Environment
- Water volume: 9 liters (2.4 gallons)
- Maximum pressure: 689.66 kPa (20psi) / 6.9 bars
- Minimum water flow rate: 22.7 liters (6 gallons) per minute
- Maximum water flow rate: 56.8 liters (15 gallons) per minute
- Water connections: 3/4 quick connect

**Note:** The water required to initially fill the system side cooling loop must be reasonably clean, bacteria-free water (<100 CFU/ml) such as de-mineralized water, reverse osmosis water, de-ionized water, or distilled water. The water must be treated with anti-biological and anti-corrosion measures. The water cannot originate from the primary chilled-water system for the building but must be supplied as part of a secondary, closed-loop system.

**Important:** Do not use glycol solutions, because they can adversely affect the cooling performance of the heat exchanger

### Tilt, shock and vibration

The rack cabinets have the following tilt, vibration and shock limits:

- Tilt:
  - 42U cabinet: 12.5 degrees
  - 48U cabinet: 10 degrees
- Vibration: 0.8 G rms at 2 Hz to 200 Hz for 15 minutes
- Shock: See the following table

Table 16. Shock data for 42U and 48U cabinets (Guided Platen Shock)

Number of drops	Free-fall drop height	Velocity change	Duration
10	40 mm (1.5 inches)	1020 mm/sec (40 in/sec)	2-3 ms
2	70 mm (2.75 inches)	1400 mm/sec (55 in/sec)	2-3 ms

For additional information, see the Specifications section of the Setup Guide for the rack cabinet, available from the Lenovo ThinkSystem Information Center, <https://thinksystem.lenovofiles.com/help/index.jsp>

### Regulatory compliance

The Heavy Duty Rack Cabinets conform to the following international standards:

- UL 2416
- China VOC (GB 30981-2020)

## Warranty upgrades and post-warranty support

The Heavy Duty Rack Cabinets have a 3 year warranty:

- Lenovo ThinkSystem 42U Heavy Duty Rack Cabinet (7D6D) - 3 year warranty
- Lenovo ThinkSystem 48U Heavy Duty Rack Cabinet (7D6E) - 3 year warranty
- Lenovo EveryScale Heavy Duty Rack Cabinet (1410) - 3 year warranty

Our global network of regional support centers offers consistent, local-language support enabling you to vary response times and level of service to match the criticality of your support needs:

- **Standard Next Business Day** – Best choice for non-essential systems requiring simple maintenance.
- **Premier Next Business Day** – Best choice for essential systems requiring technical expertise from senior-level Lenovo engineers.
- **Premier 24x7 4-Hour Response** – Best choice for systems where maximum uptime is critical.
- **Premier Enhanced Storage Support 24x7 4-Hour Response** – Best choice for storage systems where maximum uptime is critical.

For more information, consult the brochure [Lenovo Operational Support Services for Data Centers Services](#).

Table 17. Warranty upgrades

Description	Part numbers	
	Standard support	Premier support
Lenovo ThinkSystem 42U Heavy Duty Rack Cabinet (7D6D)		
Foundation Service w/Next Business Day Response, 3Yr	5WS7A92564	5WS7A92614
Foundation Service w/Next Business Day Response, 4Yr	5WS7A92566	5WS7A92616
Foundation Service w/Next Business Day Response, 5Yr	5WS7A92568	5WS7A92618
Essential Service w/24x7 4Hr Response, 3Yr	5WS7A92579	5WS7A92629
Essential Service w/24x7 4Hr Response, 4Yr	5WS7A92581	5WS7A92631
Essential Service w/24x7 4Hr Response, 5Yr	5WS7A92583	5WS7A92633
Advanced Service w/24x7 2Hr Response, 3Yr	5WS7A92594	5WS7A92644
Advanced Service w/24x7 2Hr Response, 4Yr	5WS7A92596	5WS7A92646
Advanced Service w/24x7 2Hr Response, 5Yr	5WS7A92598	5WS7A92648
Lenovo ThinkSystem 48U Heavy Duty Rack Cabinet (7D6E)		
Foundation Service w/Next Business Day Response, 3Yr	5WS7A92664	5WS7A92714
Foundation Service w/Next Business Day Response, 4Yr	5WS7A92666	5WS7A92716
Foundation Service w/Next Business Day Response, 5Yr	5WS7A92668	5WS7A92718
Essential Service w/24x7 4Hr Response, 3Yr	5WS7A92679	5WS7A92729
Essential Service w/24x7 4Hr Response, 4Yr	5WS7A92681	5WS7A92731
Essential Service w/24x7 4Hr Response, 5Yr	5WS7A92683	5WS7A92733
Advanced Service w/24x7 2Hr Response, 3Yr	5WS7A92694	5WS7A92744
Advanced Service w/24x7 2Hr Response, 4Yr	5WS7A92696	5WS7A92746
Advanced Service w/24x7 2Hr Response, 5Yr	5WS7A92698	5WS7A92748
Lenovo EveryScale 42U Heavy Duty Rack Cabinet (1410-O42, -P42)		

Description	Part numbers	
	Standard support	Premier support
Foundation Service w/Next Business Day Response, 3Yr	5WS7A92764	5WS7A92814
Foundation Service w/Next Business Day Response, 4Yr	5WS7A92766	5WS7A92816
Foundation Service w/Next Business Day Response, 5Yr	5WS7A92768	5WS7A92818
Essential Service w/24x7 4Hr Response, 3Yr	5WS7A92779	5WS7A92829
Essential Service w/24x7 4Hr Response, 4Yr	5WS7A92781	5WS7A92831
Essential Service w/24x7 4Hr Response, 5Yr	5WS7A92783	5WS7A92833
Advanced Service w/24x7 2Hr Response, 3Yr	5WS7A92794	5WS7A92844
Advanced Service w/24x7 2Hr Response, 4Yr	5WS7A92796	5WS7A92846
Advanced Service w/24x7 2Hr Response, 5Yr	5WS7A92798	5WS7A92848
Lenovo EveryScale 48U Heavy Duty Rack Cabinet (1410-O48, -P48)		
Foundation Service w/Next Business Day Response, 3Yr	5WS7A92864	5WS7A92914
Foundation Service w/Next Business Day Response, 4Yr	5WS7A92866	5WS7A92916
Foundation Service w/Next Business Day Response, 5Yr	5WS7A92868	5WS7A92918
Essential Service w/24x7 4Hr Response, 3Yr	5WS7A92879	5WS7A92929
Essential Service w/24x7 4Hr Response, 4Yr	5WS7A92881	5WS7A92931
Essential Service w/24x7 4Hr Response, 5Yr	5WS7A92883	5WS7A92933
Advanced Service w/24x7 2Hr Response, 3Yr	5WS7A92894	5WS7A92944
Advanced Service w/24x7 2Hr Response, 4Yr	5WS7A92896	5WS7A92946
Advanced Service w/24x7 2Hr Response, 5Yr	5WS7A92898	5WS7A92948

## Services

Lenovo Data Center Services empower you at every stage of your IT lifecycle. From expert advisory and strategic planning to seamless deployment and ongoing support, we ensure your infrastructure is built for success. Our comprehensive services accelerate time to value, minimize downtime, and free your IT staff to focus on driving innovation and business growth.

**Note:** Some service options may not be available in all markets or regions. For more information, go to <https://lenovocator.com/>. For information about Lenovo service upgrade offerings that are available in your region, contact your local Lenovo sales representative or business partner.

In this section:

- [Lenovo Advisory Services](#)
- [Lenovo Plan & Design Services](#)
- [Lenovo Deployment, Migration, and Configuration Services](#)
- [Lenovo Support Services](#)
- [Lenovo Managed Services](#)
- [Lenovo Sustainability Services](#)

## Lenovo Advisory Services

Lenovo Advisory Services simplify the planning process, enabling customers to build future-proofed strategies in as little as six weeks. Consultants provide guidance on projects including VM migration, storage, backup and recovery, and cost management to accelerate time to value, improve cost efficiency, and build a flexibly scalable foundation.

- **Assessment Services**

An Assessment helps solve your IT challenges through an onsite, multi-day session with a Lenovo technology expert. We perform a tools-based assessment which provides a comprehensive and thorough review of a company's environment and technology systems. In addition to the technology based functional requirements, the consultant also discusses and records the non-functional business requirements, challenges, and constraints. Assessments help organizations like yours, no matter how large or small, get a better return on your IT investment and overcome challenges in the ever-changing technology landscape.

- **Design Services**

Professional Services consultants perform infrastructure design and implementation planning to support your strategy. The high-level architectures provided by the assessment service are turned into low level designs and wiring diagrams, which are reviewed and approved prior to implementation. The implementation plan will demonstrate an outcome-based proposal to provide business capabilities through infrastructure with a risk-mitigated project plan.

## Lenovo Plan & Design Services

Unlock faster time to market with our tailored, strategic design workshops to align solution approaches with your business goals and technical requirements. Leverage our deep solution expertise and end-to-end delivery partnership to meet your goals efficiently and effectively.

## Lenovo Deployment, Migration, and Configuration Services

Optimize your IT operations by shifting labor-intensive functions to Lenovo's skilled technicians for seamless on-site or remote deployment, configuration, and migration. Enjoy peace of mind, faster time to value, and comprehensive knowledge sharing with your IT staff, backed by our best-practice methodology.

- **Deployment Services for Storage and ThinkAgile**

A comprehensive range of remote and onsite options tailored specifically for your business needs to ensure your storage and ThinkAgile hardware are fully operational from the start.

- **Hardware Installation Services**

A full-range, comprehensive setup for your hardware, including unpacking, inspecting, and positioning components to ensure your equipment is operational and error-free for the most seamless and efficient installation experience, so you can quickly benefit from your investments.

- **DM/DG File Migration Services**

Take the burden of file migration from your IT's shoulders. Our experts will align your requirements and business objectives to the migration plans while coordinating with your team to plan and safely execute the data migration to your storage platforms.

- **DM/DG/DE Health Check Services**

Our experts perform proactive checks of your Firmware and system health to ensure your machines are operating at peak and optimal efficiency to maximize up-time, avoid system failures, ensure the security of IT solutions and simplify maintenance.



- **Factory Integrated Services**

A suite of value-added offerings provided during the manufacturing phase of a server or storage system that reduces time to value. These services aim at improving your hardware deployment experience and enhance the quality of a standard configuration before it arrives at your facility.

## **Lenovo Support Services**

In addition to response time options for hardware parts, repairs, and labor, Lenovo offers a wide array of additional support services to ensure your business is positioned for success and longevity. Our goal is to reduce your capital outlays, mitigate your IT risks, and accelerate your time to productivity.

- **Premier Support for Data Centers**

Your direct line to the solution that promises the best, most comprehensive level of support to help you fully unlock the potential of your data center.

- **Premier Enhanced Storage Support (PESS)**

Gain all the benefits of Premier Support for Data Centers, adding dedicated storage specialists and resources to elevate your storage support experience to the next level.

- **Committed Service Repair (CSR)**

Our commitment to ensuring the fastest, most seamless resolution times for mission-critical systems that require immediate attention to ensure minimal downtime and risk for your business. This service is only available for machines under the Premier 4-Hour Response SLA.

- **Multivendor Support Services (MVS)**

Your single point of accountability for resolution support across vast range of leading Server, Storage, and Networking OEMs, allowing you to manage all your supported infrastructure devices seamlessly from a single source.

- **Keep Your Drive (KYD)**

Protect sensitive data and maintain compliance with corporate retention and disposal policies to ensure your data is always under your control, regardless of the number of drives that are installed in your Lenovo server.

- **Technical Account Manager (TAM)**

Your single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time, ensuring smooth operations and optimized performance as your business grows.

- **Enterprise Software Support (ESS)**

Gain comprehensive, single-source, and global support for a wide range of server operating systems and Microsoft server applications.

For more information, consult the brochure [Lenovo Operational Support Services for Data Centers](#).

## **Lenovo Managed Services**

Achieve peak efficiency, high security, and minimal disruption with Lenovo's always-on Managed Services. Our real-time monitoring, 24x7 incident response, and problem resolution ensure your infrastructure operates seamlessly. With quarterly health checks for ongoing optimization and innovation, Lenovo's remote active monitoring boosts end-user experience and productivity by keeping your data center's hardware performing at its best.

Lenovo Managed Services provides continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of your data center using state-of-the-art tools, systems, and practices by a team of highly skilled and experienced Lenovo services professionals.

Quarterly reviews check error logs, verify firmware & OS device driver levels, and software as needed. We'll also maintain records of latest patches, critical updates, and firmware levels, to ensure your systems are providing business value through optimized performance.

## **Lenovo Sustainability Services**

- **Asset Recovery Services**

Lenovo Asset Recovery Services (ARS) provides a secure, seamless solution for managing end-of-life IT assets, ensuring data is safely sanitized while contributing to a more circular IT lifecycle. By maximizing the reuse or responsible recycling of devices, ARS helps businesses meet sustainability goals while recovering potential value from their retired equipment. For more information, see the [Asset Recovery Services offering page](#).

- **CO2 Offset Services**

Lenovo's CO2 Offset Services offer a simple and transparent way for businesses to take tangible action on their IT footprint. By integrating CO2 offsets directly into device purchases, customers can easily support verified climate projects and track their contributions, making meaningful progress toward their sustainability goals without added complexity.

- **Lenovo Certified Refurbished**

Lenovo Certified Refurbished offers a cost-effective way to support IT circularity without compromising on quality and performance. Each device undergoes rigorous testing and certification, ensuring reliable performance and extending its lifecycle. With Lenovo's trusted certification, you gain peace of mind while making a more sustainable IT choice.

## **Lenovo TruScale**

Lenovo TruScale XaaS is your set of flexible IT services that makes everything easier. Streamline IT procurement, simplify infrastructure and device management, and pay only for what you use – so your business is free to grow and go anywhere.

Lenovo TruScale is the unified solution that gives you simplified access to:

- The industry's broadest portfolio – from pocket to cloud – all delivered as a service
- A single-contract framework for full visibility and accountability
- The global scale to rapidly and securely build teams from anywhere
- Flexible fixed and metered pay-as-you-go models with minimal upfront cost
- The growth-driving combination of hardware, software, infrastructure, and solutions – all from one single provider with one point of accountability.

For information about Lenovo TruScale offerings that are available in your region, contact your local Lenovo sales representative or business partner.

## Lenovo Financial Services

Why wait to obtain the technology you need now? No payments for 90 days and predictable, low monthly payments make it easy to budget for your Lenovo solution.

- **Flexible**

Our in-depth knowledge of the products, services and various market segments allows us to offer greater flexibility in structures, documentation and end of lease options.

- **100% Solution Financing**

Financing your entire solution including hardware, software, and services, ensures more predictability in your project planning with fixed, manageable payments and low monthly payments.

- **Device as a Service (DaaS)**

Leverage latest technology to advance your business. Customized solutions aligned to your needs. Flexibility to add equipment to support growth. Protect your technology with Lenovo's Premier Support service.

- **24/7 Asset management**

Manage your financed solutions with electronic access to your lease documents, payment histories, invoices and asset information.

- **Fair Market Value (FMV) and \$1 Purchase Option Leases**

Maximize your purchasing power with our lowest cost option. An FMV lease offers lower monthly payments than loans or lease-to-own financing. Think of an FMV lease as a rental. You have the flexibility at the end of the lease term to return the equipment, continue leasing it, or purchase it for the fair market value. In a \$1 Out Purchase Option lease, you own the equipment. It is a good option when you are confident you will use the equipment for an extended period beyond the finance term. Both lease types have merits depending on your needs. We can help you determine which option will best meet your technological and budgetary goals.

Ask your Lenovo Financial Services representative about this promotion and how to submit a credit application. For the majority of credit applicants, we have enough information to deliver an instant decision and send a notification within minutes.

## Related publications and links

For more information, see these resources:

- Lenovo Press Rack Cabinet Reference:  
<https://lenovopress.com/lp0658-lenovo-rack-cabinet-reference>
- Heavy Duty Rack Cabinets product publications  
[https://thinksystem.lenovofiles.com/help/topic/hdc\\_rackcabinet/ic\\_introduction.html](https://thinksystem.lenovofiles.com/help/topic/hdc_rackcabinet/ic_introduction.html)
  - User Guide
  - Unpacking Instructions
  - Rear Door Heat eXchanger V2 Installation and Maintenance Guide
- Lenovo Hardware Installation & Removal Videos on the Heavy Duty Rack Cabinets:  
<https://www.youtube.com/playlist?list=PLYV5R7hVcs-DOG7dnH9Zxy67Q3dez4ZsM>
- LeSI product page:  
<https://www.lenovo.com/us/en/data-center/servers/high-density/Lenovo-Scalable-Infrastructure/p/WMD00000276>
- DCSC configurator:  
<https://dcsc.lenovo.com/>
- x-config configurator:  
<https://lesc.lenovo.com/products/hardware/configurator/worldwide/bhui/asit/x-config.jnlp>

## Related product families

Product families related to this document are the following:

- [Rack Cabinets](#)

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