

Hitachi Universal V2 Rack

Reference Guide

This guide provides specifications about the Hitachi Universal V2 Rack and other information including supported power distribution units, rail kits and rack accessories.

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http://sourceforge.net/apps/mediawiki/tianocore/index.php?title=UDK2010

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This document provides specifications about the Hitachi Universal V2 Rack and other information including supported power distribution units, rail kits and rack accessories.

- □ Intended audience
- □ Release notes
- □ Changes in this revision
- □ Document conventions
- □ Accessing product documentation
- ☐ Getting help
- □ Comments

Intended audience

The document is intended for Hitachi customers who are responsible for planning, implementing and maintaining Hitachi storage systems installed in the Hitachi Universal V2 rack.

Release notes

Read the release notes before installing and using this product. They may contain requirements or restrictions that are not fully described in this document or updates or corrections to this document. Release notes are available on Hitachi Data Systems Support Connect: https://knowledge.hds.com/Documents.

Changes in this revision

• Added new power distribution units part numbers and specifications.

Document conventions

This document uses the following typographic conventions:

Convention	Description		
Bold	 Indicates text in a window, including window titles, menus, menu options, buttons, fields, and labels. Example: Click OK. Indicates emphasized words in list items. 		
Italic	 Indicates a document title or emphasized words in text. Indicates a variable, which is a placeholder for actual text provided by the user or for output by the system. Example: 		
	pairdisplay -g group		
	(For exceptions to this convention for variables, see the entry for angle brackets.)		
Monospace	Indicates text that is displayed on screen or entered by the user. Example: pairdisplay -g oradb		
< > angle brackets	Indicates variables in the following scenarios: • Variables are not clearly separated from the surrounding text or from other variables. Example:		
	Status- <report-name><file-version>.csv</file-version></report-name>		
	Variables in headings.		

8 Preface

Convention	Description	
[] square brackets	Indicates optional values. Example: [a b] indicates that you can choose a, b, or nothing.	
{ } braces	Indicates required or expected values. Example: $\{ a \mid b \}$ indicates that you must choose either a or b.	
vertical bar	Indicates that you have a choice between two or more options or arguments. Examples:	
	[a b] indicates that you can choose a, b, or nothing.	
	{ a b } indicates that you must choose either a or b.	

This document uses the following icons to draw attention to information:

Icon Label		Description		
Note Calls attention to important or ac		Calls attention to important or additional information.		
Tip Provides helpful information, guidelines, or suggestio tasks more effectively.		Provides helpful information, guidelines, or suggestions for performing tasks more effectively.		
		Warns the user of adverse conditions and/or consequences (for example, disruptive operations, data loss, or a system crash).		
WARNING Warns the user of a hazardous s result in death or serious injury.		Warns the user of a hazardous situation which, if not avoided, could result in death or serious injury.		

Accessing product documentation

Product user documentation is available on Hitachi Data Systems Support Connect: https://knowledge.hds.com/Documents. Check this site for the most current documentation, including important updates that may have been made after the release of the product.

Getting help

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Thank you!

Hitachi Universal V2 Rack

The following information provides an overview of the Hitachi Universal V2 rack and physical specifications of the rack.

- ☐ Hitachi Universal V2 Rack overview
- ☐ Hitachi Universal V2 Rack basic and detailed specifications

Hitachi Universal V2 Rack overview

For proper operation, Hitachi storage systems must be installed into a rack.

Hitachi storage systems, servers, and peripheral devices can be mounted in the Hitachi Universal V2 Rack. The following figure shows views of the Hitachi rack.

Hitachi Virtual Storage Platform family storage systems can also be installed in Hitachi-approved third-party racks. For more information about third-party rack specifications, contact your sales representative.



Figure 1 Hitachi Universal V2 Rack

Hitachi Universal V2 Rack basic and detailed specifications

The A3BF-600-1200-V2 rack has basic and detailed specifications for mounting Hitachi storage systems.

The following tables list the basic and detailed rack specifications.

Table 1 Basic A3BF-600-1200-V2 specifications

Specification	Description	
Product code	A3BF-600-1200-V2	
Width	23 62 in. (600 mm)*	
Depth	47.24 in. (1200 mm)	
Height 79.05 in. (2008 mm)		
Mounting height for storage equipment	42U	
Miscellaneous Black locking back door Rail kits, PDUs, and power cords must be ordered separately.		
* Installing the optional cover set extends the rack width to 23.74 in. (603 mm).		

Table 2 Detailed A3BF-600-1200-V2 specifications

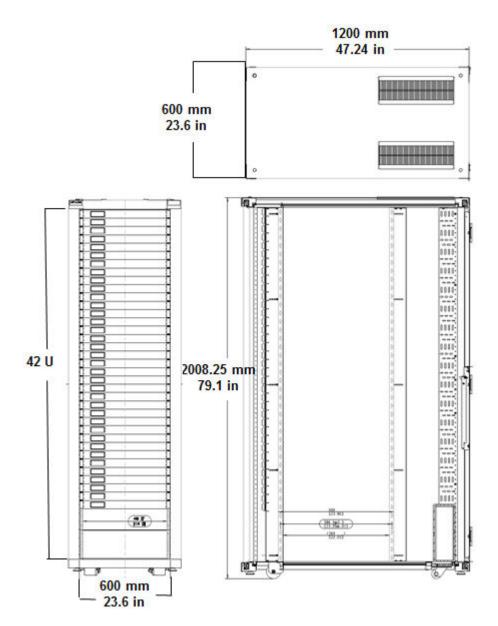
Specification	Description
Product code	A3BF-600-1200-V2
Dimensions (width x depth x height)	23.62 in. x 47.24 in. x 79.05 in. ¹ (600 mm x 1200 mm x 2008 mm)
Weight	 306 lb/139 kg 7.1 oz (includes side panels) 2315 lb/1050 kg 13.7 oz static weight capacity² 1102 lb/500 kg 5.0 oz dynamic weight capacity³
Frame	 Height: 42U Finished black (RAL 9011) with Hitachi logo and label 1 set grounding cables (earthing cable) 36 1U filler panels 1 cover set, front (left, right, and bottom)
Base	4 adjustable base legs (leveling feet)2 wheels, front2 casters, back
Roof	2 brush cut-outs, left and right
Rear	 1 door, 65% ventilated - 600 mm x 42U (width x height) 3 hinges, right side 1 swivel handle 1 lock for swivel handle, EK-1333 (keys in zip bag) 1 laptop shelf 1 door stopper
Accessories (separate box)	 1 anti-tilt cabinet stabilizer - 600 mm (width) 1 universal wrench for leveling feet 40 velcro straps 100 T-wraps - 360 mm x 4.8 mm (black) 100 cage nuts M5 100 screws M5 (black) 8 screws M5 x 8 (spare parts) 8 screws M6 x 12 (spare parts) 1 nylon strap

Specification	Description	
	 8 mounting brackets for PDUs (includes mounting material) 2 plinths, front and rear - 600 mm (width) 1 baying kit (4 pieces, includes mounting material) 	

Notes:

- 1. Installing the optional cover set extends the rack width to 603 mm (23.74 in.).
- **2.** Static weight capacity is the maximum weight the rack can support after it has been properly leveled and installed (fitted with stabilizers or secured to other equipment).
- Dynamic weight capacity is the maximum weight the rack can support while being shipped or moved with equipment installed.

The following figure shows the rack dimension with the optional cover set not installed.



Hitachi Universal V2 Rack power distribution units

The Hitachi Universal V2 Rack is equipped with specific power distribution units (PDU) for Americas, APAC, and EMEA regions. The PDUs can provide electrical power to the storage system in a single-phase or three-phase configuration.



Caution:

- Before installing third-party devices into the rack, check the electrical current draw of each device. Verify the electrical specifications and allowable current load on each PDU before plugging the device into the PDU.
- Balance the electrical current load between available PDUs.
- □ Americas single-phase PDU 1P30A-8C13-3C19UL.P
 □ Americas single-phase PDU 1P30A-15C13-3C19UL.P
 □ Americas three-phase PDU 3P30A-8C13-3C19UL.P
 □ Americas three-phase PDU 3P30A-15C13-3C19UL.P
 □ Americas three-phase PDU 3P30A-24C13-6C19UL.P
 □ APAC and EMEA single-phase PDU 1P32A-9C13-3C19CE.P
 □ APAC and EMEA single-phase PDU 1P32A-18C13-3C19CE.P
 □ APAC and EMEA three-phase PDU 3P16A-9C13-3C19CE.P
 □ APAC and EMEA three-phase PDU 3P16A-15C13-3C19CE.P
 □ APAC and EMEA three-phase PDU 3P32A-24C13-6C19CE.P

Americas single-phase PDU 1P30A-8C13-3C19UL.P

The following figure and table describes the specifications of the PDU.

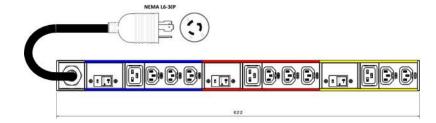


Figure 2 Americas PDU for the Hitachi Universal V2 Rack (Single-phase PDU 1P30A-8C13-3C19UL.P)

Part Number	Region	Phase	Description
1P30A-8C13-3C19UL.P	Americas	Single	 208V, 30A (24A rated) 60Hz 8 IEC C13 + 3 IEC C19 sockets NEMA L6-30P input power plug 4.5 m (14.76 feet) cable

Americas single-phase PDU 1P30A-15C13-3C19UL.P

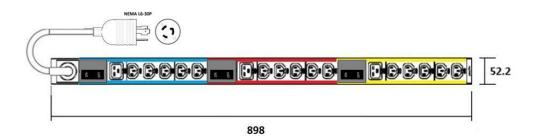


Figure 3 Americas PDU for the Hitachi Universal V2 Rack (Single-phase PDU 1P30A-15C13-3C19UL.P)

Part Number	Region	Phase	Description
1P30A-15C13-3C19UL. P	Americas	Single	• 208V, 30A (24A rated) 60Hz

Part Number	Region	Phase	Description
			 15 IEC C13 + 3 IEC C19 sockets NEMA L6-30P input power plug 4.5 m (14.76 feet) cable

Americas three-phase PDU 3P30A-8C13-3C19UL.P

The following figure and table describes the specifications of the PDU.

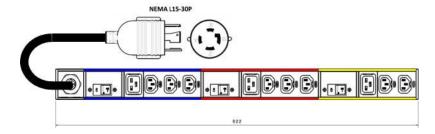


Figure 4 Americas PDU for the Hitachi Universal V2 Rack (Three-phase PDU 3P30A-8C13-3C19UL.P)

Part Number	Region	Phase	Description
3P30A-8C13-3C19UL.P	Americas	Three	 208V 3P, 30A (24A rated) 60Hz 8 IEC C13 + 3 IEC C19 sockets NEMA L15-30P input power plug 4.5 m (14.76 feet) cable

Americas three-phase PDU 3P30A-15C13-3C19UL.P

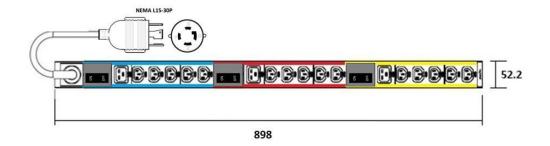


Figure 5 Americas PDU for the Hitachi Universal V2 Rack (Three-phase PDU 3P30A-15C13-3C19UL.P)

Part Number	Region	Phase	Description
3P30A-15C13-3C19UL. P	Americas	Three	 208V 3P, 30A (24A rated) 60Hz 15 IEC C13 + 3 IEC C19 sockets NEMA L15-30P input power plug 4.5 m (14.76 feet) cable

Americas three-phase PDU 3P30A-24C13-6C19UL.P

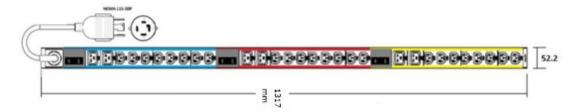


Figure 6 Americas PDU for the Hitachi Universal V2 Rack (Three-phase PDU 3P30A-24C13-6C19UL.P)

Part Number	Region	Phase	Description
3P30A-24C13-6C19UL. P	Americas	Three	 208V 3P, 30A (24A rated) 60Hz 24 IEC C13 + 6 IEC C19 sockets NEMA L15-30P input power plug 4.5 m (14.76 feet) cable

APAC and EMEA single-phase PDU 1P32A-9C13-3C19CE.P

The following figure and table describes the specifications of the PDU.

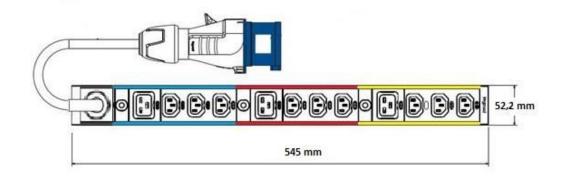


Figure 7 APAC and EMEA PDU for the Hitachi Universal V2 Rack (Single-phase 1P32A-9C13-3C19CE.P)

Part Number	Region	Phase	Description
1P32A-9C13-3C19CE.P	APAC and EMEA	Single	 230V max. 32A 50Hz / 60Hz 9 IEC C13 + 3 IEC C19 sockets IEC309 Blue 2P + E input power plug 4.5 m (14.76 feet) cable

APAC and EMEA single-phase PDU 1P32A-18C13-3C19CE.P

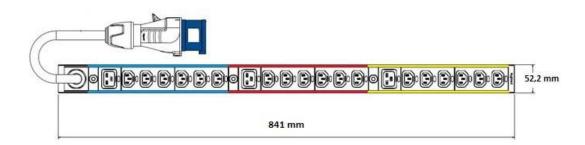


Figure 8 APAC and EMEA PDU for the Hitachi Universal V2 Rack (Singlephase 1P32A-18C13-3C19CE.P)

Part Number	Region	Phase	Description
1P32A-18C13-3C19CE. P	APAC and EMEA	Single	 230V max. 32A 50Hz / 60Hz 18 IEC C13 + 3 IEC C19 sockets IEC309 Blue 2P + E input power plug 4.5 m (14.76 feet) cable

APAC and EMEA three-phase PDU 3P16A-9C13-3C19CE.P

The following figure and table describes the specifications of the PDU.

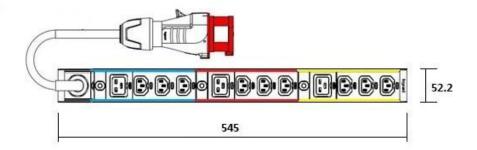


Figure 9 APAC and EMEA PDU for the Hitachi Universal V2 Rack (Three-phase 3P16A-9C13-3C19CE.P)

Part Number	Region	Phase	Description
3P16A-9C13-3C19CE.P	APAC and EMEA	Three	 400V max. 3x 16A 50Hz / 60Hz 9 IEC C13 + 3 IEC C19 sockets IEC309 Red 3P + N + E input power plug 4.5 m (14.76 feet) cable

APAC and EMEA three-phase PDU 3P16A-15C13-3C19CE.P

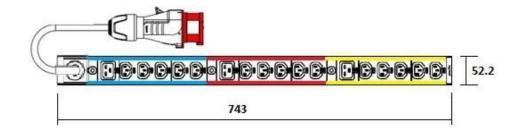


Figure 10 APAC and EMEA PDU for the Hitachi Universal V2 Rack (Three-phase 3P16A-15C13-3C19CE.P)

Part Number	Region	Phase	Description
3P16A-15C13-3C19CE.	APAC and EMEA	Three	 400V max. 3x 16A 50Hz / 60Hz 15 IEC C13 + 3 IEC C19 sockets IEC309 Red 3P + N + E input power plug 4.5 m (14.76 feet) cable

APAC and EMEA three-phase PDU 3P32A-24C13-6C19CE.P

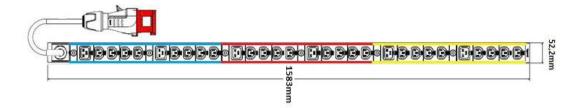


Figure 11 APAC and EMEA PDU for the Hitachi Universal V2 Rack (Three-phase 3P32A-24C13-6C19CE.P)

Part Number	Region	Phase	Description
3P32A-24C13-6C19CE. P	APAC and EMEA	Three	 400V max. 3x 32A 50Hz / 60Hz 24 IEC C13 + 6 IEC C19 sockets IEC309 Red 3P + N + E input power plug 4.5 m (14.76 feet) cable

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