

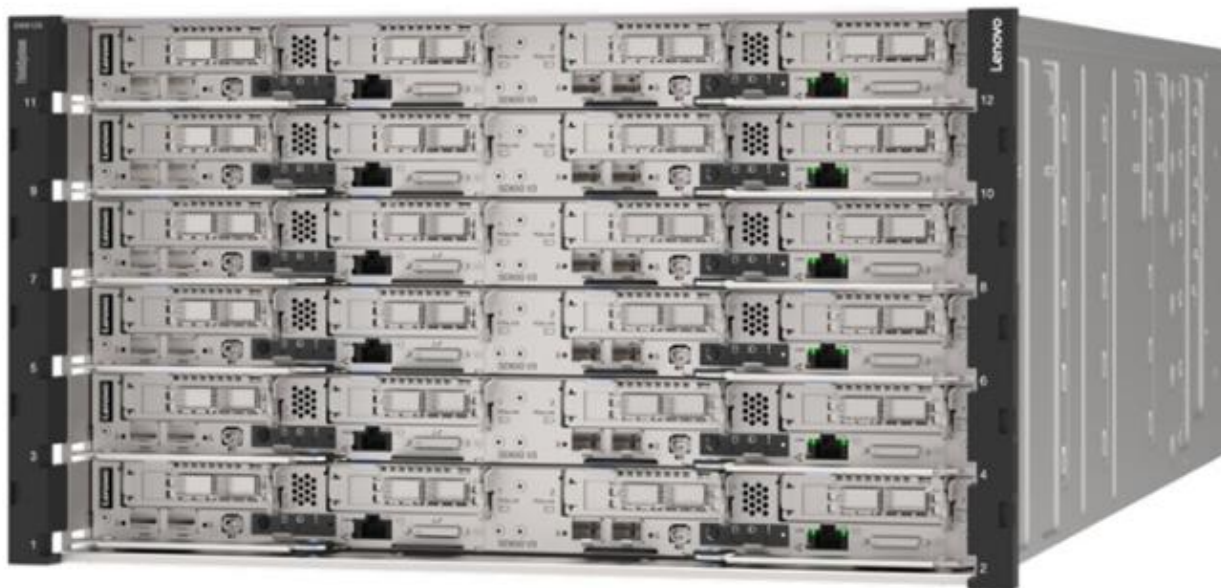
ThinkSystem DW612S enclosure overview

Product features, technical specifications

Lenovo

ThinkSystem DW612S enclosure product overview

The ThinkSystem DW612S enclosure (machine type 7D1L) is the successor to the ThinkSystem DW612 enclosure. The DW612S supports both air-cooled PSUs and water-cooled (DWC) PSUs in the rear and up to six ThinkSystem SD650 V2 or V3 series DWC trays in the front. A mix of trays is supported.



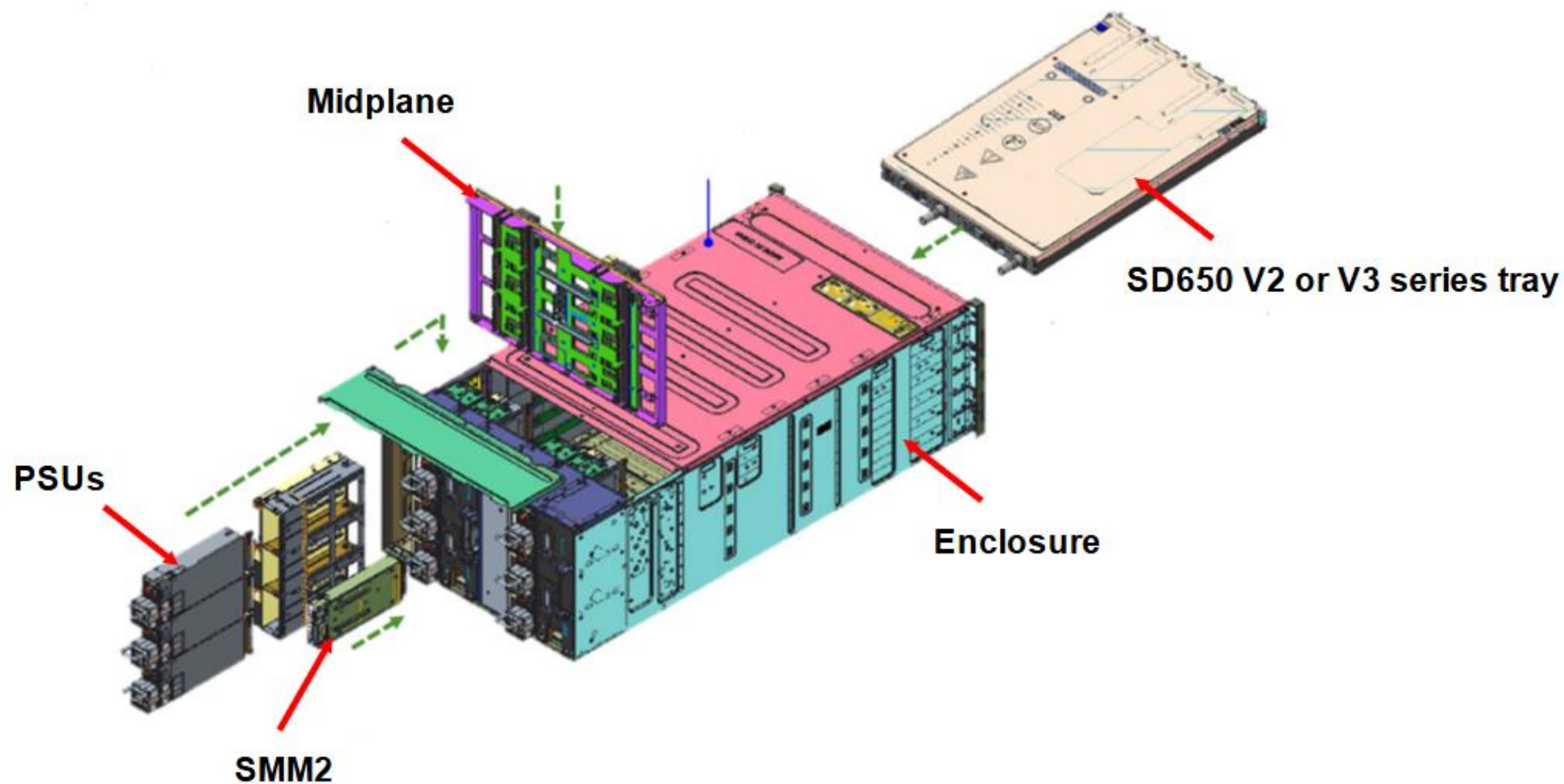
A DW612S enclosure with six SD650 V3 trays

Features and specifications

Features	Descriptions
Form factor	6U rack mounted enclosure
Support tray	Up to six SD650 V3, SD650-I V3, SD665 V3, SD665-N V3, SD650 V2, SD650-N V2, or SD650-N V3 trays
Management	<p>System Management Module (SMM2)</p> <ul style="list-style-type: none">• Same as the DW612 management module• Hot-swappable• Supports GUI and CLI consoles• Two RJ45 ports for remote management connection• One USB 2.0 port for the collection of enclosure fan and PSU FFDC logs
PSU	<ul style="list-style-type: none">• Six or nine hot-swap air-cooled hot-swap PSUs• Two or three DWC PSU hot-swap modules with each module containing three PSUs• Supports N+1 with OVS redundancy, or no redundancy
Midplane	The passive midplane provides connections from the servers in the front to the power supplies and fans at the rear. It also provides signals to control fan speed, power consumption, and node throttling as needed.

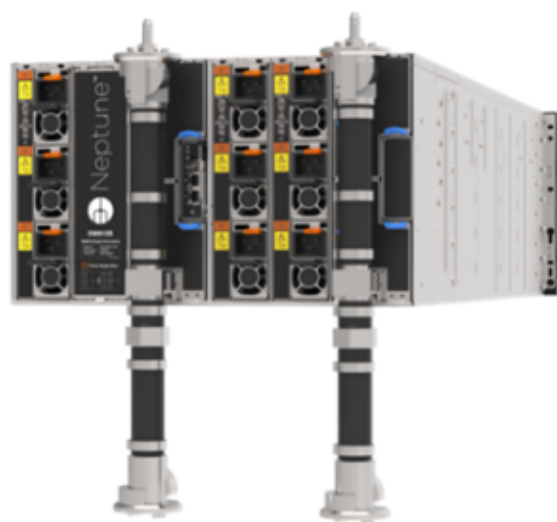
Note: Due to power limitations, a DW612S enclosure can only support a maximum of five SD650-I V3 trays while pushing the GPU power to TDP 600 W.

DW612S enclosure exploded view



PSU configuration

The DW612S supports air-cooled PSU configurations and DWC PSU configurations. Air-cooled PSUs and DWC PSUs cannot be used together in the same enclosure.



Air-cooled PSU



DWC PSU

Click the buttons to see more information about the DW612S PSU configurations.



Air-cooled PSU configurations – overview

Six air-cooled PSUs



Nine air-cooled PSUs



Click [HERE](#) to switch to the air-cooled PSU numbering view



Air-cooled PSU configurations – PSU numbering

Type 1: Six air-cooled PSUs only

Chassis ID: VPD1

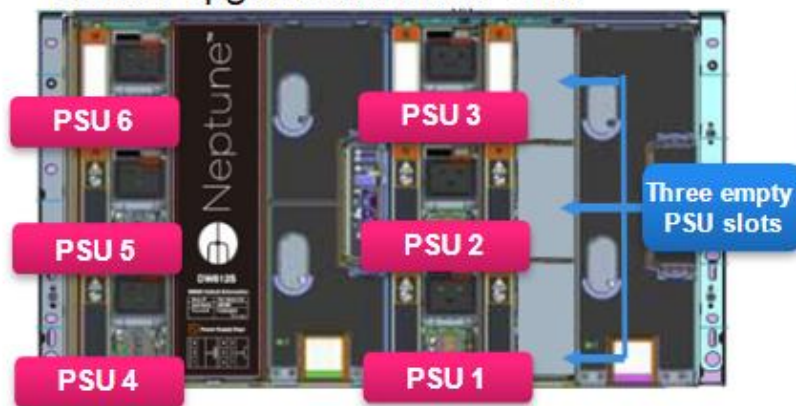
Cannot be upgraded to nine PSUs



Type 2: Six air-cooled PSUs with three empty PSU slots

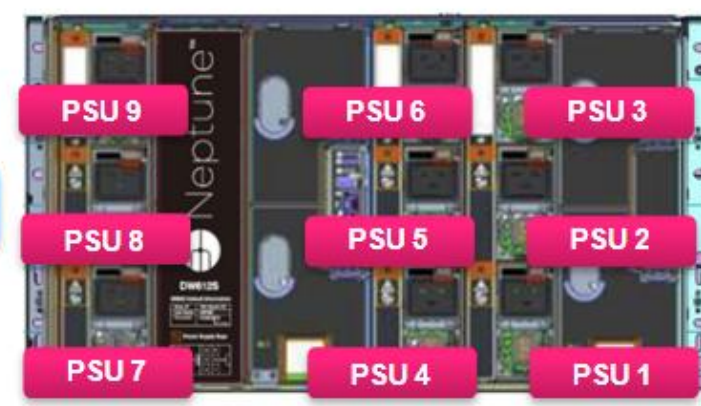
Chassis ID: VPD2

Can be upgraded to nine PSUs



Type 3: Nine air-cooled PSUs

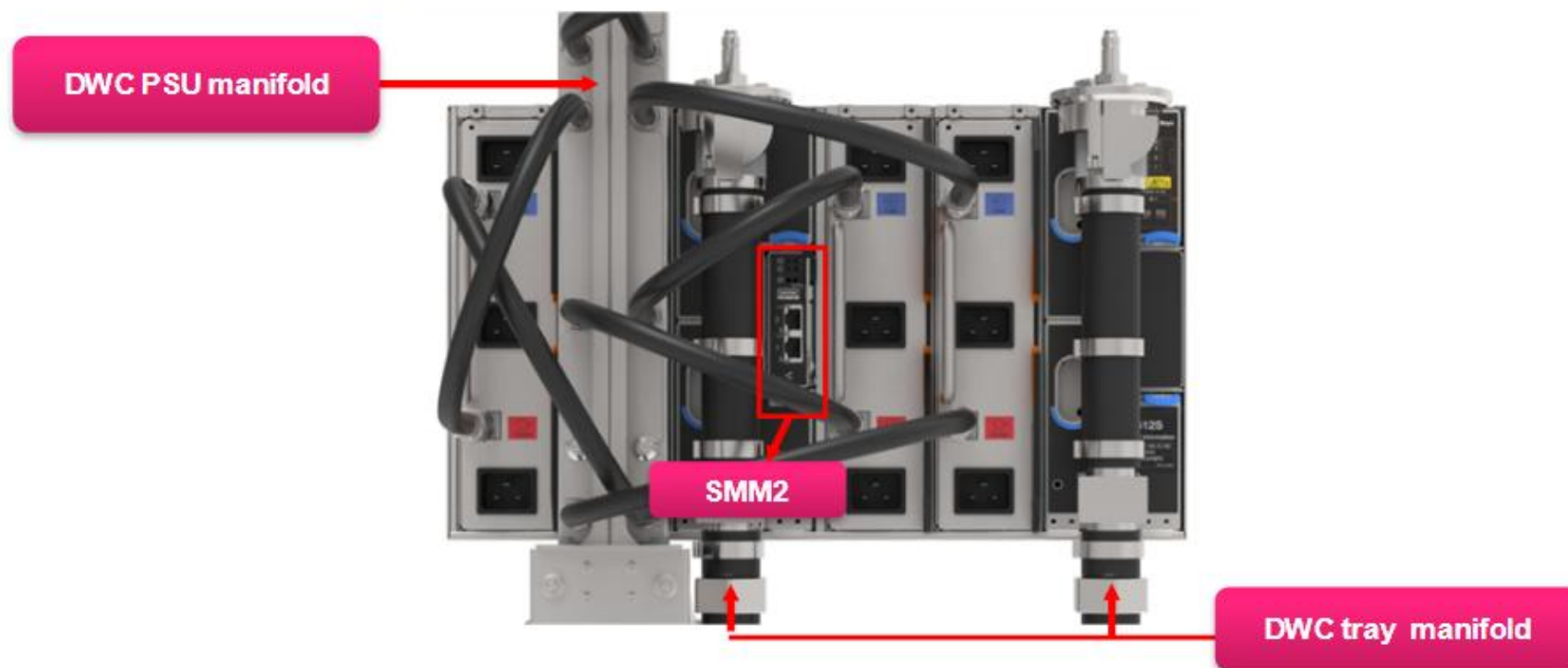
Chassis ID: VPD3



Click [HERE](#) to switch to the air-cooled PSU overview



Water-cooled PSU configurations – overview



The DW612S supports up to three water-cooled PSU modules. Each DWC PSU module contains three DWC PSUs and modules cannot be separated. If one PSU in a DWC PSU module fails, the whole DWC PSU module needs to be replaced.

Click [HERE](#) to switch to the water-cooled PSU numbering view

Click the buttons to see more information about the DW612S PSU configurations.

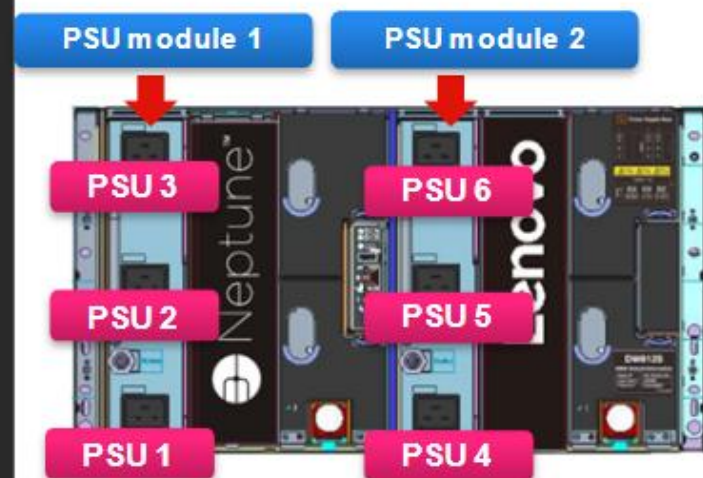


DWC PSU configurations – PSU numbering

Type 1: Six DWC PSUs only

Chassis ID: VPD4

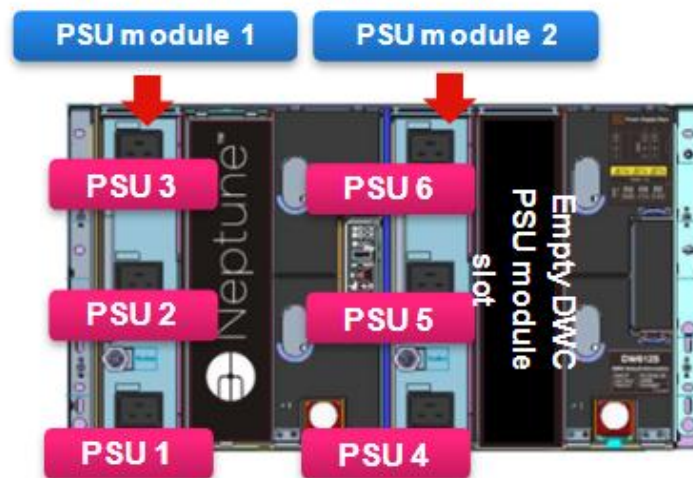
Cannot be upgraded to nine PSUs



Type 2: Six DWC PSUs with an empty DWC PSU module slot

Chassis ID: VPD5

Can be upgraded to nine DWC PSUs



Type 3: Nine DWC PSUs

Chassis ID: VPD6



Click [HERE](#) to switch to the water-cooled overview

DWC PSU manifold

The DWC PSU manifold is a 42U manifold designed for ThinkSystem SD Series DWC trays with DWC PSUs.

A DWC PSU manifold includes 18 inlet water quick connects (labeled blue) and 18 outlet water quick connects (labeled red).

