

2U24 Flash Storage Platform

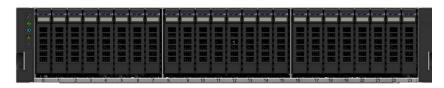
Features

- Flash storage platform with up to 24 Ultrastar[®] 2.5" SAS SSD modules or 24 CloudSpeed[™] Gen II SATA SSD modules
- Available SSD capacities include 7.68TB, 3.84TB, 1.92TB, and 960GB
- Start with as little as 12 SSDs; upgrade one additional module at a time
- 2 rack units
- Up to six 12Gb/s SAS3 connections to host
- Up to 4.7M IOPS, 23 GB/s; <1ms latency
- Easy maintenance of SSD modules. Front accessible and hot swappable.



Flash Storage Platform for Software-Defined Storage

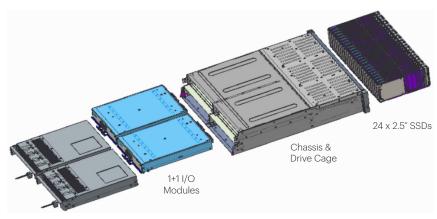
The 2U24 Flash Storage Platform is a key element of next generation software-defined storage (SDS) systems. The Platform balances performance with capacity, delivering high IOPS, low latency at up to 184TB capacity. It also offers flexibility to improve compute-to-capacity ratio by decoupling available storage from CPU resources.



Designed for Enterprise and the Cloud

The 2U24 Flash Storage Platform addresses the demanding storage needs of large enterprises and cloud service providers who require dense, shared flash storage. The Platform offers distinct features designed for today's data centers, such as:

- Enterprise-class high availability: hot swappable components including SSDs, I/O Modules, PSUs (integrated fans)
- Fully upgradeable: upgradeable firmware enables drive technology and capacity updates without impacting applications
- Support enterprise workloads including database, virtualization and scale-out configurations



1+1 Power Supplies

Figure 1. Platform Layout

One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drives, the operating system and other factors.



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Platform Models, Capacity and Performance

Model Number	1ES0243	1ES0241	1ES0242	1ES0240	1ES0107	1ES0110	1ES0108	1ES0111	
SSD Type	SATA	SATA, 960GB		SATA, 1.92TB		SAS, 3.84TB		SAS, 7.68TB	
Endurance		Read-Intensive, 0.6DW/D			Read-Intensive, 1DW/D				
# of Drives	12	24	12	24	12	24	12	24	
Capacity (TB)	11.52	23.04	23.04	46.08	46.08	92.16	92.16	183.32	
4KB Random Read IOPS	\$	735,000			3,000,000	4,700,000	3,000,000	4,700,00	
4KB Random Write IOPS	;	312,000			336,000	672,000	264,000	528,000	
Seq Read BW (MB/s)		5,700			21,350	23,000	17,800	23,000	
Seq Write BW (MB/s)		4,600			12,350	23,000	12,100	23,000	

Based on internal testing results or projections. Results and performance may vary according to system adoption, configuration and broader system architecture.

Specifications

Max. Drives	24 x 2.5" SSDs			
Drive Interface	12Gb/s SAS or 6Gb/s SATA			
Available SSD Capacities	• SAS (1DW/D): 3.84TB, 7.68TB • SATA (0.6DW/D): 960GB, 1.92TB			
Host Interface	1+1 I/O Modules (IOM), 3 Mini-SAS HD ports per IOM			
Management	SCSI Enclosure Services			
LED Indicators	Front/Rear: Power, ID, Fault			
	Drive: Activity, Fault			
Physical Dimensions Height: Width: Depth:	87.4mm (3.44″) 446mm (17.56″) 536mm (21.1″)			
Weight	 Product without SSDs: 18.3kg (40.3lbs) Product with 24 SSDs: 23.7kg (52.3lbs) 			
Power	• 1+1 600W, 80+ Gold • 90-264V AC input, auto ranging, 47-63Hz			
Cooling	 3 fan modules per power supply, front-to-rear system cooling Fan speed turning via system management interface 			
Environmental Operating Temperature: Non-op Temperature: Humidity: Operating Altitude: Sound Power:	5 to 40°C -40 to 60°C 5 to 85% relative humidity 40°C @ 3,000ft < 7.2Bels @ 23±2°C			
Serviceability	Hot-swappable IOM, power supply and SSDs			

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