



## EMC® VNX5100 and VNX5300 Series Storage Systems

### Disk and OE Matrix

P/N 300-012-417

---

To function properly, disks in an EMC® VNX® system require that each storage processor run minimum revisions of the EMC VNX Operating Environment (VNX OE). This document lists the disk part numbers supported for EMC VNX series storage systems and the minimum software revisions required for each disk model.

The disk part number (PN) appears on a label on the front of the disk carrier. Note that although the OE GUI may display an alpha suffix at the end of the PN (like PWR or EFD) these characters are not part of the actual orderable PN.



#### **CAUTION**

---

**Verify that the proper version of VNX OE is running on the storage system before installing any disk drives. Results ranging from non-recognition of the drives to data loss may occur if an improper VNX OE version is installed.**

---

## VNX series storage systems

Before installing a new disk in a storage system, use the EMC Unisphere™ Manager to determine the VNX OE revision running on the storage system. In Unisphere Manager, the VNX OE revision appears on the **Software** tab of the **Storage System Properties** dialog box for the storage system. If this revision is lower than the minimum VNX OE revision required for the disk as listed in

[Table 1](#) or [Table 2](#), you must upgrade the VNX OE on the storage system before installing the disk. EMC recommends that you upgrade VNX OE using the wizards in the System Software section of the Unisphere Service Manager (USM).

Note: Changes and additions in the tables since the last revision of this document are noted in **red** type.

**Note:** PNs in tables with a 'YES' entry in the Spin-Down Support column may report a suffix of PWR through the OE GUI (EX: 005049278PWR). This PWR suffix is used by the OE and is not part of the actual orderable PN.

**Note:** NEBS model numbers are shown in (parenthesis). Only those part numbers with a 'YES' entry in the NEBS column may be used for NEBS models.

**Note:** All PNs within this document are RoHS compliant.

Table 1 lists the standard SAS interface disk modules that you can order with VNX series storage systems and the minimum VNX OE required for each system.

**Table 1 Standard 6Gb SAS interface disk modules - Minimum VNX OE revisions required**

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
4 TB	V3-VS07-040 (N3-VS07-040)	005050749	NO	YES	6Gb SAS 3.5"	7.2K rpm	VNX5300 VNX5100	Block: 05.31.000.5.502 File: 7.0.35.3
		005050748	YES	YES				
		005050149	NO	YES				
		005050148	YES	YES				
		005050552	NO	YES				
		005050953	NO	YES				
		005050587	NO	YES				
		005050954	NO	YES				
		005052065	YES	YES				
		005052064	YES	YES				
		005052469	YES	YES				
		005052468	YES	YES				
		005052988	NO	YES				
		005052987	NO	YES				

VNX series storage systems

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
3 TB	V3-VS07-030 (N3-VS07-030) 15-disk	005049278	NO	YES	6Gb SAS 3.5"	7.2K rpm	VNX5300 VNX5100	Block: 05.31.000.5.502 File: 7.0.35.3
		005049280	NO	YES				
		005049453	YES	YES				
		005049454	YES	YES				
		005049943	NO	YES				
		005049945	NO	YES				
		005050331	YES	YES				
		005050332	NO	YES				
		005050744	YES	YES				
		005050745	NO	YES				
		005050144	YES	YES				
		005050145	NO	YES				
		005050553	NO	YES				
		005050949	NO	YES				
		005050585	NO	YES				
		005050950	NO	YES				
		005052063	YES	YES				
		005052062	YES	YES				
		005052467	YES	YES				
		005052466	YES	YES				
005052986	NO	YES						
005052985	NO	YES						
2 TB	V3-VS07-020 (N3-VS07-020) 15-disk	005049277	NO	YES	6Gb SAS 3.5"	7.2K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049279	NO	YES				
		005049449	YES	YES				
		005049450	YES	YES				
		005049748	NO	YES				
		005049496	YES	YES				
		005049497	YES	YES				
		005050037	YES	YES				
		005050290	YES	YES				
		005050329	NO	YES				
		005050330	NO	YES				
		005050740	YES	YES				
		005050741	NO	YES				
		005050140	YES	YES				

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
		005050141	NO	YES				
		005050554	NO	YES				
		005050945	NO	YES				
		005050583	NO	YES				
		005050946	NO	YES				
		005052061	YES	YES				
		005052060	YES	YES				
		005052465	YES	YES				
		005052464	YES	YES				
		005052984	NO	YES				
		005052983	NO	YES				
1 TB	V3-VS07-010 15-disk	005049305	NO	YES	6Gb SAS 3.5"	7.2K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049494	YES	YES				
		005049407	NO	YES				
		005049493	YES	YES				
		005050036	YES	YES				
		005050287	YES	YES				
		005050736	YES	YES				
		005050737	YES	YES				
		005050136	YES	YES				
		005050137	YES	YES				
		005052388	YES	YES				
		005052387	YES	YES				
		005052463	NO	YES				
		005052462	NO	YES				
		005052982	NO	YES				
		005052981	NO	YES				

VNX series storage systems

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
900 GB	V3-2S10-900 (N3-2S10-900) 25-disk	005049206	YES	YES	6Gb SAS 2.5"	10K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049295	YES	NO				
		005049951	NO	YES				
		005049925	YES	YES				
		005049810	NO	YES				
		005049809	YES	YES				
		005050350	NO	YES				
		005050349	YES	YES				
		005050701	YES	YES				
		005050212	YES	YES				
		005050704	NO	YES				
		005050215	NO	YES				
		005051468	YES	YES				
		005051467	YES	YES				
		005051462	NO	YES				
		005051461	NO	YES				
		005051958	NO	YES				
		005051957	NO	YES				
		005052302	NO	YES				
		005052301	NO	YES				
		005052960	YES	YES				
		005052959	YES	YES				
		005053441	NO	YES				
		005053442	NO	YES				
			V3-VS10-900 (N3-VS10-900) 15-disk	005049205				
005049302	YES			NO				
005049956	YES			NO				
005049924	YES			YES				
005049806	YES			YES				
005049807	YES			YES				
005050346	YES			YES				
005050347	NO			YES				
005050695	YES			YES				
005050206	YES			YES				
005050698	YES			YES				
005050209	YES			YES				
005051454	YES			YES				
005051453	YES			YES				
005051448	NO			YES				

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
		005051447	NO	YES				
		005051944	NO	YES				
		005051943	NO	YES				
		005052294	NO	YES				
		005052293	NO	YES				
		005052952	YES	YES				
		005052951	YES	YES				
		005053433	NO	YES				
		005053434	NO	YES				
600 GB	V3-VS15-600 (N3-VS15-600) 15-disk  <b>IMPORTANT NOTE:</b> Preferred break-fix replacement parts are 005050854 & 005050855	005049274 005049272 005049675 005049677 005050928 005050927 005050924 005050957 005050855 005050854 005050851 005050850 005052933 005052934	YES YES YES YES NO NO NO NO NO NO NO NO YES YES	NO NO YES YES YES YES YES YES YES YES YES YES YES YES	6Gb SAS 3.5"	15K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0

VNX series storage systems

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
	V3-VS10-600 (N3-VS10-600) 15-disk	005049249	YES	YES	6Gb SAS 3.5"	10K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005050335	NO	YES				
		005049301	YES	YES				
		005049202	YES	YES				
		005049818	YES	YES				
		005050281	NO	YES				
		005050284	NO	YES				
		005049801	NO	YES				
		005049802	NO	YES				
		005050342	NO	YES				
		005050343	NO	YES				
		005050694	YES	YES				
		005050205	YES	YES				
		005050697	YES	YES				
		005050208	YES	YES				
		005051452	YES	YES				
		005051451	YES	YES				
		005051446	NO	YES				
		005051445	NO	YES				
		005051942	NO	YES				
		005051941	NO	YES				
		005050336	YES	YES				
		005052292	NO	YES				
		005052291	NO	YES				
		005052950	YES	YES				
		005052949	YES	YES				
		005053432	NO	YES				
		005053431	NO	YES				
	V3-2S10-600 (N3-2S10-600) 25-disk	005049250	YES	YES	6Gb SAS 2.5"	10K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049294	YES	YES				
		005049203	NO	NO				
		005049820	NO	NO				
		005050282	YES	YES				
		005050285	NO	YES				
005049804		NO	YES					
005049805		NO	YES					
005050344		NO	YES					
005050345		NO	YES					



Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
		005050334	YES	YES				
		005050333	YES	YES				
		005050700	YES	YES				
		005050211	YES	YES				
		005050703	NO	YES				
		005050214	NO	YES				
		005051466	YES	YES				
		005051465	YES	YES				
		005051460	NO	YES				
		005051459	NO	YES				
		005051956	NO	YES				
		005051955	NO	YES				
		005052300	NO	YES				
		005052299	NO	YES				
		005052958	YES	YES				
		005052957	YES	YES				
		005053439	NO	YES				
		005053440	NO	YES				
300 GB	V3-VS15-300 (N3-VS15-300) 15-disk  <b>IMPORTANT</b> <b>NOTE:</b> Preferred break-fix replacement parts are 005050852 & 005050853	005049273	YES	NO				
		005049271	YES	NO				
		005049671	YES	YES				
		005049673	YES	YES				
		005050926	NO	YES				
		005050925	NO	YES				
		005050922	NO	YES	6Gb SAS	15K rpm	VNX5300	Block: 05.31.000.5.006
		005050921	NO	YES	3.5"		VNX5100	File: 7.0.12.0
		005050853	NO	YES				
		005050852	NO	YES				
		005050849	NO	YES				
		005050848	NO	YES				
		005052931	YES	YES				
		005052932	YES	YES				

VNX series storage systems

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
	V3-VS10-300 (N3-VS10-300) 15-disk	005049175	YES	NO	6Gb SAS 3.5"	10K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049299	YES	NO				
		005049196	NO	NO				
		005049819	NO	NO				
		005050280	NO	NO				
		005050278	NO	NO				
		005049796	NO	NO				
		005049797	NO	NO				
		005050338	NO	NO				
		005050339	NO	NO				
		005050693	NO	NO				
		005050696	NO	NO				
		005050204	NO	NO				
		005050207	NO	NO				
		005051450	NO	NO				
		005051449	NO	NO				
		005051444	YES	NO				
		005051443	YES	NO				
		005051940	NO	NO				
		005051939	NO	NO				
		005052290	NO	NO				
		005052289	NO	NO				
		005052948	YES	NO				
	005052947	YES	NO					
	005053429	NO	NO					
	005053430	NO	NO					
	V3-2S10-300 (N3-2S10-300) 25-disk	005048946	YES	NO	6Gb SAS 2.5"	10K rpm	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049292	YES	NO				
		005049197	NO	NO				
		005049821	NO	NO				

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
		005050277	NO	NO				
		005050279	NO	NO				
		005049799	NO	NO				
		005049800	NO	NO				
		005050340	NO	NO				
		005050341	NO	NO				
		005050702	NO	NO				
		005050213	NO	NO				
		005051464	YES	NO				
		005051463	YES	NO				
		005051458	NO	NO				
		005051457	NO	NO				
		005051954	NO	NO				
		005051953	NO	NO				
		005052298	NO	NO				
		005052297	NO	NO				
		005050699	NO	NO				
		005050210	NO	NO				
		005052956	YES	NO				
		005052955	YES	NO				
		005053437	NO	NO				
		005053438	NO	NO				

Table 2 lists the standard Enterprise Flash Drive (EFD) interface disk modules that you can order with VNX series storage systems and the minimum VNX OE required for each system.

**Table 2 Standard EFD (enterprise flash drive) SAS interface disk modules - Minimum OE revisions required**

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
---------------	---------------------------	-------------	------	-------------------	------------	---------------	----------	------------------------------

VNX series storage systems

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
200 GB	V3-2S6F-200 (N3-2S6F-200) FLV32S6F-200 25-disk	005049264	YES	NA	6Gb SAS 2.5" EFD	NA	VNX5300 VNX5100	Block: 05.31.000.5.502 File: 7.0.35.3
		005049297	YES					
		005049622	NO					
		005050188	NO					
		005050368	NO					
		005050366	NO					
		005051197	NO					
		005051195	NO					
		005052188	YES					
		005052189	YES					
005053277	YES							
005053278	YES							
		005050502	YES	NA	6Gb SAS 2.5" EFD	NA	VNX5300 VNX5100	Block: 05.32.000.5.217 File: 7.1.79.6
		005050503	YES					
200 GB	V3-VS6F-200 (N3-VS6F-200) FLV3VS6F-200 15-disk	005049185	YES	NA	6Gb SAS 3.5" EFD	N/A	VNX5300 VNX5100	Block: 05.31.000.5.006 File: 7.0.12.0
		005049298	NO					
		005049884	YES					
		005049885	YES					
		005050184	NO	NA	6Gb SAS 3.5" EFD	N/A	VNX5300 VNX5100	Block: 05.31.000.5.502 File: 7.0.35.3
		005050186	NO					
		005050364	NO					
		005050362	NO					
		005051193	NO					
		005051191	NO					
		005052184	YES					
		005052185	YES					
		005053273	YES					
		005053274	YES					
		005050498	YES	NA	6Gb SAS 3.5" EFD	NA	VNX5300 VNX5100	Block: 05.32.000.5.217 File: 7.1.79.6
005050499	YES							
100 GB	V3-2S6F-100 (N3-2S6F-100) FLV32S6F-100 25-disk	005049263	YES	NA	6Gb SAS 2.5" EFD	NA	VNX5300 VNX5100	Block: 05.31.000.5.502 File: 7.0.35.3
		005049296	YES					
		005049621	NO					
		005050187	NO					
		005050367	NO					
		005050365	NO					

Disk capacity	Model number (NEBS Model)	Part number	NEBS	Spin-Down Support	Drive type	Spindle speed	Platform	Minimum OE software revision
		005051388	NO					
		005051387	NO					
		005052186	YES					
		005052187	YES					
		005053275	YES					
		005053276	YES					
		005050500	YES	NA	6Gb SAS		VNX5300	Block: 05.32.000.5.217
		005050501	YES		2.5" EFD	NA	VNX5100	File: 7.1.79.6
100 GB	V3-VS6F-100 (N3-VS6F-100) FLV3VS6F-100 15-disk	005049184	YES	NA	6Gb SAS		VNX5300	Block: 05.31.000.5.006
		005049229	NO					
		005049882	YES					
		005049883	YES					
		005050183	YES	NA	6Gb SAS		VNX5300	Block: 05.31.000.5.502
		005050185	YES					
		005050363	YES					
		005050361	YES					
		005051380	NO					
		005051379	NO					
		005052182	YES					
		005052183	YES					
		005053271	YES					
005053272	YES							
005050496	YES	NA	6Gb SAS		VNX5300	Block: 05.32.000.5.217		
005050497	YES						3.5" EFD	NA

### Available disk space

Table 3 lists the usable space for the disks listed in Table 1 and Table 2.

**Table 3 Usable disk space**

Listed capacity <sup>1</sup>	USABLE CAPACITY PER DISK	
	Disk	VNX5100, VNX5300
4 TB	Disk 0-3 (vault disk)	3613.7965GB
	Other disk	3668.6685GB
3 TB	Disk 0-3 (vault disk)	2568.0829GB
	Other disk	2751.5097GB
2 TB	Disk 0-3 (vault disk)	1650.9104GB
	Other disk	1834.3373GB
1 TB	Disk 0-3 (vault disk)	733.7379GB
	Other disk	917.1648GB
900 GB	Disk 0-3 (vault disk)	637.1739GB
	Other disk	820.6008GB
600 GB	Disk 0-3 (vault disk)	353.3638GB
	Other disk	536.7907GB
300 GB	Disk 0-3 (vault disk)	84.9597GB
	Other disk	268.3865GB
200 GB	Disk 0-3 (vault disk)	Not supported as vault disk
	Other disk	183.4268GB
100 GB	Disk 0-3 (vault disk)	Not supported as vault disk
	Other disk	91.7096GB

<sup>1</sup> The listed capacity is the disk capacity listed for the disks in [Table 1](#) and [Table 2](#).

## Supported disk-array enclosures

Table 4 lists the disk-array enclosures (DAEs) supported for VNX storage systems.

**Table 4 Supported disk-array enclosures (DAEs)**

DAE type	VNX	
	VNX5100	VNX5300
3U 3.5" x 15	V31-DAE-R-15 V31-DAE-N-15	V31-DAE-R-15 V31-DAE-N-15
2U 2.5" x 25	V2-DAE-R-25-A V2-DAE-N-25-A	V2-DAE-R-25-A V2-DAE-N-25-A

Table 5 lists the disk models supported for the DAEs.

**Table 5 Disk models supported for disk-array enclosures (DAEs)**

DAE type	Storage systems: VNX5100, VNX5300			
	7200RPM	10K RPM	15K RPM	FLASH
3U 3.5" x 15	V3-VS07-xxx	V3-VS10-xxx	V3-VS15-xxx	V3-VS6F-xxx
2U 2.5" x 25	N/A	V3-2S10-xxx	N/A	V3-2S6F-xxx

© 2018 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

The information in this publication is provided "as is". Dell Inc. makes no representations or warranties of any kind with respect to the information in this publication, and specifically disclaims implied warranties of merchantability or fitness for a particular purpose.