Overview

Nimble Storage Secondary Flash Arrays

Nimble Storage Secondary Flash Arrays from Nimble Storage, a Hewlett Packard Enterprise company, let you put your backup data to work. Designed to simply and efficiently handle tasks like Veeam backups and disaster recovery, they also offer the flash-optimized performance needed to run development/test, QA, and analytics workloads on your copy data—plus production workloads when needed.

Back up and recover data from any primary storage array nearly instantaneously. Save space with always-on, inline deduplication and compression, Simplify data management through integration with leading availability software for virtualization environments from Veeam. Don't wait for a disaster—put your backup data to work today.

Nimble Storage Secondary Flash Arrays scale from effective capacities of 128TB to 1.6PB[1]. Backed by the Timeless Storage guarantee, there is no need to pay for optional software and forklift upgrades can become a thing of the past.

Designed to radically simplify operations, Nimble Storage Secondary Flash Arrays feature InfoSight Predictive Analytics predict and prevent issues across the infrastructure stack. Even the most complex issues are rapidly resolved because InfoSight has already collected the necessary information to solve the problem, removing the need for complex troubleshooting. As a result, traditional level 1 and 2 support staff is completely automated by InfoSight. The Nimble Storage support organization is entirely composed of level 3 experts who answer calls in less than a minute on average.

NOTE: For more information about the entire Nimble Storage product portfolio, go to **http://www.nimblestorage.com**. Nimble Storage products are not available in some markets.

Nimble Storage SF100/SF300 Secondary Flash Array
(Base array, 4U; 21 bays hold carriers with Large Form Factor HDDs,
3 bays hold Dual Flash Carriers with Small Form Factor SSDs)

NOTE: Assumes a data reduction ration of 8:1 when used as a Veeam target.

Overview

Put Your Backup Data to Work

- Secondary storage that does real work: Zero-copy cloning and flash performance let you use your backup data for development/test, QA, analytics, and more.
- Data reduction without penalty: Always-on, inline deduplication and compression increases effective capacity without impacting backup and recovery.
- Peace of mind: Flash performance to verify backups quickly and easily, plus 99.9999% measured availability[2] for when you need to run production workloads too.

Reduce Backup and Recovery Windows

- Near-instant restores: Access files, virtual machines, applications, and entire systems directly on the Secondary Flash Array and/or rapidly copy them back to primary storage.
- Near-instant disaster recovery: Fail over to the Secondary Flash Array to resume running production workloads at speed.
- Near-instant, snapshot-based backups: No more backup windows and zero impact to hosts.

Simplify Operations

- Easy availability for virtualized environments: Built-in integration and validation with Veeam Availability Suite delivers broad compatibility, whether you're using primary storage arrays from HPE or from another vendor.
- Worry-free operations: InfoSight Predictive Analytics anticipate and prevent issues, automatically predicting and resolving 86% of problems before you even know an issue exists[2].
- Simple acquisition and refresh: All Nimble Storage arrays feature the Timeless Storage guarantee[3], which means hidden costs and forklift upgrades can become a thing of the past.

NOTE:

[2]Based on actual customer data collected by the Nimble Storage Support organization as of March 2017. Refer to the whitepaper **Redefining the Standard for System Availability** for additional details (registration required).

[3] Refer to **https://www.nimblestorage.com/satisfaction-guarantee/** for details. Subject to Nimble Storage General Terms and Conditions available at **http://www.nimblestorage.com/docs**.

Overview

Nimble Storage Secondary Flash Array models

	Nimble Storage SF100		Nimble Storage SF300		
Number of controllers	2				
Number of drives	(21) LFF Hard Drives				
Raw capacity in base array[1]	21 TB	42 TB	84 TB	126 TB	210 TB
Usable capacity in base array[1]	16 TB	33 TB	67 TB	101 TB	169 TB
Effective capacity in base array[1, 2]	128 TB	264 TB	536 TB	808 TB	1352 TB
Flash Capacity in base array[3]	1.44 TB	2.88 TB	5.76 TB	9.6 TB	27.87 TB
Maximum capacity	Up to 126 TB		Up to 252 TB		
Expansion Shelves	Up to (2) Expansion Shelves				
RAID level	Triple+ Parity RAID				
On-board connectivity	(4) 1 GbE/10 GbE ports, (2) per controller				
Additional host connectivity	(4) 1/10GbE iSCSI (10GBASE-T), or (4) 1/10GbE iSCSI (Optical), or (4) 8/16Gb Fibre Channel; depending on configuration				

Expansion Shelves for Nimble Storage Secondary Flash Arrays

	Expansion Shelf with 21 TB	Expansion Shelf with 42 TB	Expansion Shelf with 84 TB	Expansion Shelf with 126 TB
Compatible with	Nimble Storage Secondary Flash Arrays			
Number of drives	21 drives			
Raw capacity in expansion shelf[1]	21 TB	42 TB	84 TB	126 TB
Usable capacity in expansion shelf[1]	16 TB	33 TB	67 TB	101 TB
Effective capacity in expansion shelf[1, 2]	128 TB	264 TB	536 TB	808 TB
Flash Capacity in expansion shelf[3]	1.44 TB	2.88 TB	5.76 TB	9.6 TB
RAID level	Triple+ Parity RAID			

NOTE: Specifications are subject to change without notice.
[1] For storage capacity, 1 GiB = 230 bytes and 1 TiB = 1,024 GiB.
[2] Assuming 8:1 data reduction ratio when using as a Veeam target. Other workloads might yield lower data reduction ratio.
[3] Flash Capacity is provided by Solid State Drives, upgradable with Flash Upgrade Kits.

Host OS Support

Microsoft® Windows® Server, including Microsoft® Hyper-V™ | VMware vSphere™ | Ubuntu
SUSE® Linux Enterprise | SUSE® Linux Virtualization | Red Hat® Enterprise Linux® | Red Hat® Enterprise Virtualization
CentOS | Oracle® Linux® (UEK and RHEL compatible kernels) | Oracle® Solaris Citrix® | IBM® AIX®

For the latest information on supported operating systems refer to Single Point of Connectivity Knowledge (SPOCK) for HPE Storage products, including Nimble Storage: **http://www.hpe.com/storage/spock**

Service and Support and Warranty Information

Warranty

Nimble Storage arrays come with the following warranties:

- 1 year, parts-only warranty for hardware components
- 90 day, software updates for defects

Additionally, Nimble Storage will provide phone support for replacing a defective part. Additional support coverage is required for Nimble Storage arrays.

NOTE: Warranty is provided Nimble Storage, an HPE company.

Service and Support

Support is required for all Nimble Storage arrays. Support SKUs provide three years of 24x7 telephone and email support for the arrays with a choice of Next Business Day (NBD) or 4-hour parts delivery*, access to Nimble Storage's InfoSight Predictive Analytics platform and software updates.

NOTE: Support contract is mandatory for all Nimble Storage products.

Installation Service

New Array Installation (USA/Canada only)
On-site installation of a new Nimble Storage array in a data center.

New Remote Installation
Remote installation of a new Nimble Storage array in a data center.

Upgrade Kit or Expansion Shelf Installation (USA/Canada only)
On-site installation of upgrades kits or expansion shelves for an existing Nimble Storage array.

NOTE: Installation services are optional for all Nimble Storage products.

NOTE:* Available in select markets; for areas not currently covered, Nimble Storage offers on-site spare parts/kits for purchase.

Configuration Information

Nimble Storage Secondary Flash Arrays

All Nimble Storage Secondary Flash Arrays come in a 4U form-factor chassis with
- (2) controllers with fans and NVDIMM,
- (4) 1GbE/10GbE network ports, i.e. (2) per controller, for iSCSI or management traffic and
- (2) power supplies and (2) C13/C14 power cords.

Nimble Storage Secondary Flash Arrays come with (21) LFF Hard Drives included as standard and supports (3) Dual Flash Carriers with SFF Solid State Drives. The configurations below include three SFF SSDs and accept one optional Flash Upgrade Kit to increase the Flash Cache (except for the Nimble Storage SF300 Secondary Flash Array with 210TB raw capacity). Additional capacity can be added by connecting expansion shelves to the base array.

Additional host connectivity per controller is indicated in the product description below.
Flash Cache upgrades and expansion shelves are available for integration in the field.

Nimble Storage SF100 Secondary Flash Array

Base Array

Nimble Storage SF100 2x10GBASE-T 21x1TB HDD 3x480GB Flash Array **Q2Q42A**
Includes base with the following
- Disk configuration: (21) 1 TB HDDs for 21TB raw capacity
- Flash configuration: (3) 480 GB SDDs
- Additional connectivity: (2) 10GbE iSCSI (10GBASE-T) ports per controller

Requires Nimble Storage SF100 21TB 3yr NBD Support or
Nimble Storage SF100 21TB 3yr 4hr Support

Nimble Storage SF100 2x10GbE 21x1TB HDD 3x480GB Flash Array **Q2Q43A**
Includes base with the following
- Disk configuration: (21) 1 TB HDDs for 21TB raw capacity
- Flash configuration: (3) 480 GB SDDs
- Additional connectivity: (2) 10GbE Optical iSCSI ports per controller

Requires Nimble Storage SF100 21TB 3yr NBD Support or
Nimble Storage SF100 21TB 3yr 4hr Support

Nimble Storage SF100 2x16Gb FC 21x1TB HDD 3x480GB Flash Array **Q2Q44A**
Includes base with the following
- Disk configuration: (21) 1 TB HDDs for 21TB raw capacity
- Flash configuration: (3) 480 GB SDDs
- Additional connectivity: (2) 8/16Gb FC ports per controller

Requires Nimble Storage SF100 21TB 3yr NBD Support or
Nimble Storage SF100 21TB 3yr 4hr Support

Nimble Storage SF100 2x10GBASE-T 21x2TB HDD 3x960GB Flash Array **Q2Q45A**
Includes base with the following
- Disk configuration: (21) 2 TB HDDs for 42TB raw capacity
  Flash configuration: (3) 960 GB SDDs
- Additional connectivity: (2) 10GbE iSCSI (10GBASE-T) ports per controller

Requires Nimble Storage SF100 42TB 3yr NBD Support or
Nimble Storage SF100 42TB 3yr 4hr Support

Nimble Storage SF100 2x10GbE 21x2TB HDD 3x960GB Flash Array **Q2Q46A**
Includes base with the following
- Disk configuration: (21) 2 TB HDDs for 42TB raw capacity

Configuration Information

	• Flash configuration: (3) 960 GB SDDs • Additional connectivity: (2) 10GbE Optical iSCSI ports per controller Requires Nimble Storage SF100 42TB 3yr NBD Support or Nimble Storage SF100 42TB 3yr 4hr Support	
	Nimble Storage SF100 2x16Gb FC 21x2TB HDD 3x960GB Flash Array Includes base with the following • Disk configuration: (21) 2 TB HDDs for 42TB raw capacity • Flash configuration: (3) 960 GB SDDs • Additional connectivity: (2) 8/16Gb FC ports per controller Requires Nimble Storage SF100 42TB 3yr NBD Support or Nimble Storage SF100 42TB 3yr 4hr Support	**Q2Q47A**
Support options (mandatory)	Nimble Storage SF100 21TB 3yr NBD Support	Q2Q90A
	Nimble Storage SF100 21TB 3yr 4hr Support	Q2Q91A
	Nimble Storage SF100 42TB 3yr NBD Support	Q2Q92A
	Nimble Storage SF100 42TB 3yr 4hr Support	Q2Q93A

Configuration Information

Nimble Storage SF300 Secondary Flash Array

Base Array

Nimble Storage SF300 2x10GBASE-T 21x4TB HDD 3x1.92TB Flash Array **Q2Q51A**
Includes base with the following
- Disk configuration: (21) 4 TB HDDs for 84 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs
- Additional connectivity: (2) 10GbE iSCSI (10GBASE-T) ports per controller

Requires Nimble Storage SF300 84TB 3yr NBD Support or
Nimble Storage SF300 84TB 3yr 4hr Support

Nimble Storage SF300 2x10GbE 21x4TB HDD 3x1.92TB Flash Array **Q2Q52A**
Includes base with the following
- Disk configuration: (21) 4 TB HDDs for 84 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs
- Additional connectivity: (2) 10GbE Optical iSCSI ports per controller

Requires Nimble Storage SF300 84TB 3yr NBD Support or
Nimble Storage SF300 84TB 3yr 4hr Support

Nimble Storage SF300 2x16Gb FC 21x4TB HDD 3x1.92TB Flash Array **Q2Q53A**
Includes base with the following
- Disk configuration: (21) 4 TB HDDs for 84 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs
- Additional connectivity: (2) 8/16Gb FC ports per controller

Requires Nimble Storage SF300 84TB 3yr NBD Support or
Nimble Storage SF300 84TB 3yr 4hr Support

Nimble Storage SF300 2x10GBASE-T 21x6TB HDD **Q2Q48A**
2x3.84TB and 1x1.92TB Flash Array
Includes base with the following
- Disk configuration: (21) 6 TB HDDs for 126TB raw capacity
- Flash configuration: (2) 3.84 TB SSDs and (1) 1.92 TB
- Additional connectivity: (2) 10GbE iSCSI (10GBASE-T) ports per controller

Requires Nimble Storage SF300 126TB 3yr NBD Support or
Nimble Storage SF300 126TB 3yr 4hr Support

Nimble Storage SF300 2x10GbE 21x6TB HDD 2x3.84TB and 1x1.92TB Flash Array **Q2Q49A**
Includes base with the following
- Disk configuration: (21) 6 TB HDDs for 126TB raw capacity
- Flash configuration: (2) 3.84 TB SSDs and (1) 1.92 TB
- Additional connectivity: (2) 10GbE Optical iSCSI ports per controller

Requires Nimble Storage SF300 126TB 3yr NBD Support or
Nimble Storage SF300 126TB 3yr 4hr Support

Nimble Storage SF300 2x16Gb FC 21x6TB HDD **Q2Q50A**
2x3.84TB and 1x1.92TB Flash Array
Includes base with the following
- Disk configuration: (21) 6 TB HDDs for 126TB raw capacity
- Flash configuration: (2) 3.84 TB SSDs and (1) 1.92 TB
- Additional connectivity: (2) 8/16Gb FC ports per controller

Requires Nimble Storage SF300 126TB 3yr NBD Support or
Nimble Storage SF300 126TB 3yr 4hr Support

Nimble Storage SF300 2x10GBASE-T 21x10TB HDD **Q2Q54A**
3x3.84TB and 3x1.92TB Flash Array
Includes base with the following
- Disk configuration: (21) 10 TB HDDs for 210 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs and (3) 1.92 TB
- Additional connectivity: (2) 10GbE iSCSI (10GBASE-T) ports per controller

Configuration Information

Requires Nimble Storage SF300 210TB 3yr NBD Support or
Nimble Storage SF300 210TB 3yr 4hr Support

Nimble Storage SF300 2x10GbE 21x10TB HDD **Q2Q55A**

3x3.84TB and 3x1.92TB Flash Array
Includes base with the following

- Disk configuration: (21) 10 TB HDDs for 210 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs and (3) 1.92 TB
- Additional connectivity: (2) 10GbE Optical iSCSI ports per controller

Requires Nimble Storage SF300 210TB 3yr NBD Support or
Nimble Storage SF300 210TB 3yr 4hr Support

Nimble Storage SF300 2x16Gb FC 21x10TB HDD **Q2Q56A**

3x3.84TB and 3x1.92TB Flash Array
Includes base with the following

- Disk configuration: (21) 10 TB HDDs for 210 TB raw capacity
- Flash configuration: (3) 3.84 TB SSDs and (3) 1.92 TB
- Additional connectivity: (2) 8/16Gb FC ports per controller

Requires Nimble Storage SF300 210TB 3yr NBD Support or
Nimble Storage SF300 210TB 3yr 4hr Support

Support (mandatory)	Nimble Storage SF300 84TB 3yr NBD Support	Q2Q96A
	Nimble Storage SF300 84TB 3yr 4hr Support	Q2Q97A
	Nimble Storage SF300 126TB 3yr NBD Support	Q2Q94A
	Nimble Storage SF300 126TB 3yr 4hr Support	Q2Q95A
	Nimble Storage SF300 210TB 3yr NBD Support	Q2Q98A
	Nimble Storage SF300 210TB 3yr 4hr Support	Q2Q99A

Configuration Information

Options for Nimble Storage Secondary Flash Arrays

Nimble Storage Secondary Flash Arrays accept one optional Flash Upgrade Kit to increase the Flash Cache. Additional capacity can be added to an existing base array by connecting expansion shelves. Nimble Storage SF Expansion Shelves come with (2) C13/C14 power cords and (2) 1m 12Gb/s SAS cables.

NOTE: SF100 supports up to 126 GB raw capacity and SF300 supports up to 252 TB raw capacity. Both arrays can be connected to up to (2) Expansion Shelves, within maximum capacity limits of the array.

Upgrades	**Nimble Storage SF 3x960GB Flash Upgrade Kit** Includes (3) 960 GB SSD for 2.88 TB Flash Cache for an existing SF100 or SFA300, requires Nimble Storage SF 2.88TB Flash Upgrade Kit 3yr NBD Support or Nimble Storage SF 2.88TB Flash Upgrade Kit 3yr 4hr Support	**Q2Q57A**
	Nimble Storage SF 3x1.92TB Flash Upgrade Kit Includes (3) 1.92 TB SSD for 5.76 TB Flash Cache for an existing SF100 or SFA300, requires Nimble Storage SF 5.76 TB Flash Upgrade Kit 3yr NBD Support or Nimble Storage SF 5.76 TB Flash Upgrade Kit 3yr 4hr Support	**Q2Q58A**
Expansion Shelves	**Nimble Storage SF 21x1TB HDD 3x480GB Flash Expansion Shelf** Capacity expansion shelf with 21 TB raw capacity and Flash Cache for SF100 or SF300, requires Nimble Storage SF 21TB Expansion Shelf 3yr NBD Support or Nimble Storage SF 21TB Expansion Shelf 3yr 4hr Support	**Q2Q61A**
	Nimble Storage SF 21x2TB HDD 3x960GB Flash Expansion Shelf Capacity expansion shelf with 42 TB raw capacity and Flash Cache for SF100 or SF300, requires Nimble Storage SF 42TB Expansion Shelf 3yr NBD Support or Nimble Storage SF 42TB Expansion Shelf 3yr 4hr Support	**Q2Q62A**
	Nimble Storage SF 21x4TB HDD 3x1.92TB Flash Expansion Shelf Capacity expansion shelf with 84 TB raw capacity and Flash Cache for SF100 or SF300, requires Nimble Storage SF 84TB Expansion Shelf 3yr NBD Support or Nimble Storage SF 84TB Expansion Shelf 3yr 4hr Support	**Q2Q63A**
	Nimble Storage SF 21x6TB HDD 2x3.84TB and 1x1.92TB Flash Expansion Shelf Capacity expansion shelf with 126 TB raw capacity and Flash Cache for SF100 or SF300, requires Nimble Storage SF 126TB Expansion Shelf 3yr NBD Support or Nimble Storage SF 126TB Expansion Shelf 3yr 4hr Support	**Q2Q59A**

Support (mandatory)	Nimble Storage SF 2.88TB Flash Upgrade Kit 3yr NBD Support	Q2R00A
	Nimble Storage SF 2.88TB Flash Upgrade Kit 3yr 4hr Support	Q2R02A
	Nimble Storage SF 5.76TB Flash Upgrade Kit 3yr NBD Support	Q2R01A
	Nimble Storage SF 5.76TB Flash Upgrade Kit 3yr 4hr Support	Q2R03A
	Nimble Storage SF 21TB Expansion Shelf 3yr NBD Support	Q2R08A
	Nimble Storage SF 21TB Expansion Shelf 3yr 4hr Support	Q2R09A
	Nimble Storage SF 42TB Expansion Shelf 3yr NBD Support	Q2R10A
	Nimble Storage SF 42TB Expansion Shelf 3yr 4hr Support	Q2R11A
	Nimble Storage SF 84TB Expansion Shelf 3yr NBD Support	Q2R12A
	Nimble Storage SF 84TB Expansion Shelf 3yr 4hr Support	Q2R13A
	Nimble Storage SF 126TB Expansion Shelf 3yr NBD Support	Q2R04A
	Nimble Storage SF 126TB Expansion Shelf 3yr 4hr Support	Q2R05A

Configuration Information

Installation Services

Installation services accelerate the installation and startup: Nimble Storage Pro Installation Services provide rapid planning, installation, and validation of Nimble Storage arrays into your environment

NOTE: On-site installation services are only available in the USA and Canada; installation services are optional.

Nimble Storage Upgrade Kit/Expansion Shelf Installation Service	Q2R14A
Nimble Storage New Array Installation Service	Q2R15A
Nimble Storage New Array Remote Installation Service	Q2R16A
Nimble Storage Additional Array Installation Service	Q2R17A

Racks

Nimble Storage arrays and expansion shelves are compatible with industry standard 4-post EIA 19 inch racks with square mounting holes, including HPE 36U, 42U and 47U Enterprise Shock Racks.

For more information on the HPE rack offerings, please see the following URL:
http://h18004.www1.hpe.com/products/servers/platforms/rackandpower.html.
For more information on rack options, see:
http://www.hpe.com/products/rackoptions.
For more information on PDUs, see:
http://h18004.www1.hpe.com/products/servers/proliantstorage/power-protection/pdu.html

Additional power cords

Nimble Storage arrays and expansion shelves come with (2) C13/C14 power cords included as standard. A pair of additional power cords (country/region specific) are required when connecting base arrays or expansion shelves to office power outlets.

Country/Region	Description	
Australia/New Zealand	HPE PWR CRD, 2.5m, 10A, C13—AU/NZ	AF569A
Europe (France, Germany, Spain)	HPE PWR CRD, 1.83m, 10A, C13—European	AF568A
Japan	HPE PWR CRD, 2m, 12A, C13—Japan	AF572A
Israel	HPE PWR CRD, 1.83m, 10A, C13—Israel	AF564A
India	HPE PWR CRD, 2m, 6A, C13—India	AF562A
Italy	HPE PWR CRD, 1.83m, 10A, C13—IT/CL	AF571A
South Korea	HPE PWR CRD, 1.83m, 10A, C13—Korea	AF560A
South Africa	HPE PWR CRD, 2.5m, 10A, C13—South Africa	AF567A
Taiwan	HPE PWR CRD, 1.83m, 13A, C13—Taiwan	AF561A
U.S./Canada	HPE PWR CRD, 1.83m, 10A, C13—U.S.	AF556A
United Kingdom/Hong Kong/Singapore	HPE PWR CRD, 1.83m, 10A, C13—UK	AF570A

Technical Specifications

Physical Dimensions	Width in/mm	Depth in/mm	Height in/mm/U	Weight lb/kg
Nimble Storage Secondary Flash Arrays	17.5/445	26.5/673	7/175/4	105/48
Nimble Storage SF Series Expansion Shelves	17.5/445	26.5/673	7/175/4	90/41
Nimble Storage SF Series Flash Upgrade Kits	12/305	12/305	7/175	3/2

Power Requirements	Nimble Storage SF100	Nimble Storage SF300
Input Voltage		
AC PCM option	100 to 240 VAC (50 to 60 Hz)	
Max power requirements (Watts/kVA)	700 W / 0.78 kVA	800 W / 0.89 kVA
Thermal (BTU)	2293 BTU	2620 BTU

Environmental Specifications[4]

Operating Temperature	10 - 35° C (50 - 95° F) Reduce rating by 1° F for each 1000 ft altitude (1.8° C/1,000 m)
Shipping Temperature	0° C - 40° C (32° F - 104° F) Maximum rate of change is 20°C/hr (36°F/hr)
Operating Altitude (ft/m) max.	10,000 ft / 3,048 m
Shipping Altitude (ft/m) max.	40,000ft/ 12,192 m
Humidity	8 - 90%, non-condensing
Shipping Humidity	5 - 95%, non-condensing
Operating Vibration	0.25 G, Sine 5 - 200 Hz (approx. 15 min/axis); 0.4 GRMS, Random 5 - 200 Hz (approx. 60 min/axis)
Non-operating Vibration	0.5 G, Sine 5 - 200 Hz (approx. 15 min/axis); 0.98 GRMS, Random 5 - 500Hz (approximate 30 min/axis)
Operating Shock	20 G, 2.5ms, half-sine, one shock on each side
Non-operating Shock	20 G, 10ms, square wave, one shock on each side

Technical Specifications

Electromagnetic Compatibility	Subpart B of Part 15 of FCC Rules for Class A digital devices ICES-003, Issue 6, dated January 2016 (Class A) VCCI V-3: April 2014 (Class A) EN 55022:2010 CISPR 22:2008 AS/NZS CISPR 22:2009 +A1:2010 EN55032:2012 CISPR 32:2012 EN 55024:2010 CISPR 24:2010 +A1:2015 TCVN 7189:2009 NBTC TS 3001-2555 TP TC 020/2011

Acoustics Sound pressure level measured per ISO 7779 specs during normal operating fan	Fan Speed (RPM)	Standard Speed (3540 RPM)	Full Speed (13000 RPM)
	Front	65.5	72.0
	Back	71.2	75.8
	Left	65.6	69.0
	Right	65.6	70.7

Safety	EN60950-1:2005 (Second Edition); Am1:2009 + Am2:2013 IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013 EN60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 UL/IEC 60960-1 2nd Ed. Am1 + Am2 CNS14336-1 ('99) CNS13438 ('95) NOM-019-SCFI-1998 NBTC TS 4001-2550 TP TC 004/2011 IS 13252 (PART 1):2010 +A1:2013 + A2:2-15 SANS IEC 60950-1

NOTE: [4] Specifications are subject to change without notice.

Certifications / Markings		
	UL	NOM
	cUL	MoEc
	CE	NBTC SDoC
	FCC Class A	CITC/CoC*
	IC Class A	EAC
	VCCI Class A	BIS
	RCM	LOA (S. Africa)
	BSMI Class A	RoHS 2011/65/EU, EN50581:2012
	KC	WEEE
	CCC Exemption	

Summary of Changes

Date	Version History	Action	Description of Change
12-Jun-2017	From Version 1 to 2	Changed	Detail on included power cords and SAS cables
5-Jun-2017	Version 1	Created	Created first version, including SF100 and SF300.

Sign up for updates

Hewlett Packard Enterprise

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