ThinkSystem S4620 Mixed Use SATA 6Gb SSDs
Product Guide

The ThinkSystem S4520 Mixed Use SATA SSDs are advanced data center SSDs optimized for mixed read-write performance, endurance and strong data protection. Compared with the Intel S4610 series, these new drives offer improved endurance.

The S4620 SSDs with up to 5 full drives writes per day (DWD) are an excellent choice as cache in transactional application and high-speed storage for enterprise databases.

Figure 1. ThinkSystem S4620 Mixed Use SATA 6Gb SSD (without the hot-swap drive tray)

Did you know?

By combining the latest Intel 3D NAND TLC Flash Memory technology with Intel's latest controller technology, the design of the S4620 SSDs delivers consistent performance, reduced power consumption, and end-to-end data protection, as well as being optimized for IOPS/watt and cost/IOPS.

Rigorous testing of S4620 SSDs by Lenovo through the ServerProven program assures a high degree of storage subsystem compatibility and reliability. Providing additional peace of mind, these drives are covered under Lenovo warranty.

Part number information

The following table lists the ordering information for drives for ThinkSystem servers.

Table 1. Ordering information

Part number	Feature	Description
2.5-inch hot-swap 6 Gb SATA SSDs		
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD
3.5-inch hot-swap 6 Gb SATA SSDs		
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD
4XB7A17139	BA4Y	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD
4XB7A17140	BK7P	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD
3.5-inch simple-swap 6 Gb SATA SSDs		
4XB7A17134	BK7M	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb SS SSD
4XB7A17135	BK7N	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb SS SSD
7mm 2.5-inch hot-swap 6 Gb SATA SSDs		
4XB7A17131	BM8J	ThinkSystem 7mm S4620 480GB Mixed Use SATA 6Gb HS SSD
4XB7A78626	BM8F	ThinkSystem 7mm S4620 3.84TB Mixed Use SATA 6Gb HS SSD
7mm trayless drives		
4XB7A77060	BM8J	ThinkSystem 2.5" 7mm S4620 480GB Mixed Use SATA 6Gb Trayless SSD
4XB7A77061	BKSY	ThinkSystem 2.5" 7mm S4620 960GB Mixed Use SATA 6Gb Trayless SSD
4XB7A77062	BKSZ	ThinkSystem 2.5" 7mm S4620 1.92TB Mixed Use SATA 6Gb Trayless SSD
4XB7A78629	BM1F	ThinkSystem 2.5" 7mm S4620 3.84TB Mixed Use SATA 6Gb Trayless SSD

Features

The S4620 SSDs have the following features:

- 2.5-inch drives in multiple form form factors:
    - 2.5-inch SFF hot-swap tray
    - 7mm hot-swap tray
    - 3.5-inch LFF hot-swap tray
    - 3.5-inch LFF simple-swap tray
    - Trayless drives
- Cost-effective Intel 3D NAND TLC Flash Memory
- Endurance of up to 5 drive writes per day (DWPD) for 5 years, using Intel Standard Endurance Technology (SET).
- SATA TLC solid-state drive with high read performance and consistently low latencies to fulfill client needs in the enterprise space
- High reliability and enhanced ruggedness
- Energy savings, with typical write power consumption as low as 3.0 W per drive
- Absence of moving parts to reduce potential failure points in the server
- S.M.A.R.T. support
- Advanced Encrypting Standard (AES) 256-bit encryption
- Full end-to-end data path protection
- Thermal throttling to extend the life of the drive
- Enhanced power loss data protection

SSDs have a huge but finite number of program/erase (P/E) cycles, which affect how long they can perform write operations and thus their life expectancy. Mixed Use (Mainstream) SSDs typically have a better cost per read IOPS ratio but lower endurance and performance compared to Write Intensive (Performance) SSDs. SSD write endurance is typically measured by the number of program/erase cycles that the drive can incur over its lifetime, which is listed as total bytes written (TBW) in the device specification.

The TBW value that is assigned to a solid-state device is the total bytes of written data that a drive can be guaranteed to complete. Reaching this limit does not cause the drive to immediately fail; the TBW simply denotes the maximum number of writes that can be guaranteed. A solid-state device does *not* fail upon reaching the specified TBW. However, at some point after surpassing the TBW value (and based on manufacturing variance margins), the drive reaches the end-of-life point, at which time the drive goes into read-only mode. Because of such behavior, careful planning must be done to use SSDs in the application environments to ensure that the TBW of the drive is not exceeded before the required life expectancy.

For example, the S4620 3.84 TB drive has an endurance of 35.1 PB (35,100 TB) of total bytes written (TBW). This means that for full operation over five years, write workload must be limited to no more than 19,233 GB of writes per day, which is equivalent to 5.0 full drive writes per day (DWPD). For the device to last three years, the drive write workload must be limited to no more than 32,055 GB of writes per day, which is equivalent to 8.3 full drive writes per day.

Technical specifications

The following table presents technical specifications for the S4620 SSDs.

Table 2. Technical specifications

Feature	480 GB drive	960 GB drive	1.92 TB drive	3.84 TB drive
Interface	6 Gbps SATA	6 Gbps SATA	6 Gbps SATA	6 Gbps SATA
Capacity	480 GB	960 GB	1.92 TB	3.84 TB
SED encryption	None	None	None	None
Endurance (drive writes per day)	4.7 DWPD	4.0 DWPD	4.0 DWPD	5.0 DWPD
Endurance (total bytes written)	4.2 PB	7.1 PB	14.0 PB	35.1 PB
Data reliability	< 1 in 10^{17} bits read	< 1 in 10^{17} bits read	< 1 in 10^{17} bits read	< 1 in 10^{17} bits read
MTBF	2,000,000 hours	2,000,000 hours	2,000,000 hours	2,000,000 hours
IOPS reads (4 KB blocks)	85,000	90,000	91,000	91,000
IOPS writes (4 KB blocks)	48,000	54,000	53,000	60,000
Sequential read rate (128 KB blocks)	550 MBps	550 MBps	550 MBps	550 MBps
Sequential write rate (128 KB blocks)	500 MBps	510 MBps	510 MBps	510 MBps
Read latency (sequential)	36 µs	37 µs	37 µs	36 µs
Write latency (sequential)	36 µs	37 µs	38 µs	38 µs
Read latency (random)	103 µs	103 µs	104 µs	104 µs
Write latency (random)	43 µs	45 µs	47 µs	45 µs
Shock, operating	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms
Shock, non-operating	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms	1,000 G (Max) at 0.5 ms
Vibration, operating	2.17 G_{RMS} (5-700 Hz)	2.17 G_{RMS} (5-700 Hz)	2.17 G_{RMS} (5-700 Hz)	2.17 G_{RMS} (5-700 Hz)
Vibration, non-operating	3.13 G_{RMS} (5-800 Hz)	3.13 G_{RMS} (5-800 Hz)	3.13 G_{RMS} (5-800 Hz)	3.13 G_{RMS} (5-800 Hz)
Typical power (Active Write Avg)	3.0 W	3.0 W	3.3 W	3.9 W

Server support

The following tables list the ThinkSystem servers that are compatible.

Table 3. Server support (Part 1 of 3)

Part Number	Description	Edge		1S Intel V2			AMD V3			Intel V3				Dense V3				2S Intel V2			
		SE350 (7Z46 / 7D1X)	SE450 (7D8T)	ST50 V2 (7D8K / 7D8J)	ST250 V2 (7D8G / 7D8F)	SR250 V2 (7D7R / 7D7Q)	SR645 V3 (7D9C)	SR665 V3 (7D9B / 7D9A)	SR675 V3 (7D9Q / 7D9R)	SR630 V3 (7D72 / 7D73)	SR650 V3 (7D75 / 7D76)	SR850 V3 (7D97 / 7D96)	SR860 V3 (7D94 / 7D93)	SD665 V3 (7D9P)	SD665-N V3 (7DAZ)	SD650 V3 (7D7M)	SD650-I V3 (7D7L)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)
2.5-inch hot-swap 6 Gb SATA SSDs																					
4XB7A17125	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y
4XB7A17126	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y
4XB7A17127	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y
4XB7A17128	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y
3.5-inch hot-swap 6 Gb SATA SSDs																					
4XB7A17137	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	N	N	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	Y	Y	Y	Y
4XB7A17138	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	N	N	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	Y	Y	Y	Y
4XB7A17139	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	Y	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	Y
4XB7A17140	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	Y	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	Y
3.5-inch simple-swap 6 Gb SATA SSDs																					
4XB7A17134	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A17135	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7mm 2.5-inch hot-swap 6 Gb SATA SSDs																					

Part Number	Description	Edge		1S Intel V2			AMD V3			Intel V3				Dense V3				2S Intel V2			
		SE350 (7Z46 / 7D1X)	SE450 (7D8T)	ST50 V2 (7D8K / 7D8J)	ST250 V2 (7D8G / 7D8F)	SR250 V2 (7D7R / 7D7Q)	SR645 V3 (7D9D / 7D9C)	SR665 V3 (7D9B / 7D9A)	SR675 V3 (7D9Q / 7D9R)	SR630 V3 (7D72 / 7D73)	SR650 V3 (7D75 / 7D76)	SR850 V3 (7D97 / 7D96)	SR860 V3 (7D94 / 7D93)	SD665 V3 (7D9P)	SD665-N V3 (7DAZ)	SD650 V3 (7D7M)	SD650-I V3 (7D7L)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)
4XB7A17131	ThinkSystem 7mm S4620 480GB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A78626	ThinkSystem 7mm S4620 3.84TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7mm trayless drives																					
4XB7A77060	ThinkSystem 2.5" 7mm S4620 480GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	N
4XB7A77061	ThinkSystem 2.5" 7mm S4620 960GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	N
4XB7A77062	ThinkSystem 2.5" 7mm S4620 1.92TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	N
4XB7A78629	ThinkSystem 2.5" 7mm S4620 3.84TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	N

Table 4. Server support (Part 2 of 3)

Part Number	Description	AMD V1					4S/8S V2			4S V1			Dense V2				1S Intel V1			
		SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR655 Client OS	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)
2.5-inch hot-swap 6 Gb SATA SSDs																				
4XB7A17125	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	N	Y	N	Y
4XB7A17126	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	N	Y	N	Y

Part Number	Description	AMD V1					4S/8S V2			4S V1			Dense V2				1S Intel V1			
		SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR655 Client OS	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)
4XB7A17127	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	N	N	Y	N	N	N	N
4XB7A17128	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	N	N	Y	N	N	N	N
3.5-inch hot-swap 6 Gb SATA SSDs																				
4XB7A17137	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
4XB7A17138	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
4XB7A17139	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A17140	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3.5-inch simple-swap 6 Gb SATA SSDs																				
4XB7A17134	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
4XB7A17135	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
7mm 2.5-inch hot-swap 6 Gb SATA SSDs																				
4XB7A17131	ThinkSystem 7mm S4620 480GB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A78626	ThinkSystem 7mm S4620 3.84TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
7mm trayless drives																				
4XB7A77060	ThinkSystem 2.5" 7mm S4620 480GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
4XB7A77061	ThinkSystem 2.5" 7mm S4620 960GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
4XB7A77062	ThinkSystem 2.5" 7mm S4620 1.92TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
4XB7A78629	ThinkSystem 2.5" 7mm S4620 3.84TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N

Table 5. Server support (Part 3 of 3)

Part Number	Description	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)
		2S Intel V1								**Dense V1**			
2.5-inch hot-swap 6 Gb SATA SSDs													
4XB7A17125	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
4XB7A17126	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
4XB7A17127	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
4XB7A17128	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
3.5-inch hot-swap 6 Gb SATA SSDs													
4XB7A17137	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
4XB7A17138	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
4XB7A17139	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
4XB7A17140	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
3.5-inch simple-swap 6 Gb SATA SSDs													
4XB7A17134	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A17135	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb SS SSD	N	N	N	N	N	N	N	N	N	N	N	N
7mm 2.5-inch hot-swap 6 Gb SATA SSDs													
4XB7A17131	ThinkSystem 7mm S4620 480GB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A78626	ThinkSystem 7mm S4620 3.84TB Mixed Use SATA 6Gb HS SSD	N	N	N	N	N	N	N	N	N	N	N	N
7mm trayless drives													
4XB7A77060	ThinkSystem 2.5" 7mm S4620 480GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A77061	ThinkSystem 2.5" 7mm S4620 960GB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A77062	ThinkSystem 2.5" 7mm S4620 1.92TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A78629	ThinkSystem 2.5" 7mm S4620 3.84TB Mixed Use SATA 6Gb Trayless SSD	N	N	N	N	N	N	N	N	N	N	N	N

Operating system support

SSDs operate transparently to users, storage systems, applications, databases, and operating systems.

Operating system support is based on the controller used to connect to the drives. Consult the controller propduct guide for more information:

- RAID controllers: https://lenovopress.com/servers/options/raid
- SAS HBAs: https://lenovopress.com/servers/options/hba

Warranty

The S4620 SSDs carry a one-year, customer-replaceable unit (CRU) limited warranty. When the SSDs are installed in a supported server, these drives assume the servers's base warranty and any warranty upgrades.

Solid State Memory cells have an intrinsic, finite number of program/erase cycles that each cell can incur. As a result, each solid state device has a maximum amount of program/erase cycles to which it can be subjected. The warranty for Lenovo solid state drives (SSDs) is limited to drives that have not reached the maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the SSD product. A drive that reaches this limit may fail to operate according to its Specifications.

Physical specifications

The S4620 SSDs have the following physical specifications (approximate, without the tray):

- Height: 7 mm (0.3 in.)
- Width: 70 mm (2.8 in.)
- Depth: 100 mm (4.0 in.)
- Weight: less than 70 g (2.5 oz lb)

Shipping dimensions and weight - 2.5-inch drives (approximate, including the tray):

- Height: 63 mm (2.5 in.)
- Width: 174 mm (6.9 in.)
- Depth: 133 mm (5.2 in.)
- Weight: 434 g (1.0 lb)

Shipping dimensions and weight - 3.5-inch drives (approximate, including the tray):

- Height: 95 mm (3.7 in.)
- Width: 257 mm (10.1 in.)
- Depth: 193 mm (7.6 in.)
- Weight: 484 g (1.1 lb)

Operating environment

The S4620 SSDs are supported in the following environment:

- Temperature: 0 - 70°C (32 - 158°F)
- Relative humidity: 5 - 95% (noncondensing)
- Maximum altitude: 3,050 m (10,000 ft)

Agency approvals

The S4620 SSDs conform to the following regulations:

- FCC Title 47, Part 15B, Class B
- EN-55035:2017
- EN-55022:2006
- EN-55032:2012
- Low Voltage Directive (LVD) 2014/35/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- UL 60950-1, 2nd Edition, 2014-10-14
- CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-010
- UL/CSA 62368-1, 2nd Edition
- AS/NZ CISPR 32:2015
- AS/NZ CISPR 22:2009 +A1:2010
- Taiwan BSMI EMC standard CNS 13438
- Korea KCC Article 11.1
- Morocco Decree # 2574-14 (EMC)
- Canada ICES-003
- Japan VCCI
- China EFUP

Related publications and links

For more information, see the following documents:

- Lenovo ThinkSystem storage options product web page
  https://lenovopress.com/lp0761-storage-options-for-thinksystem-servers
- Intel SSD Data Center S4520 Series product page
  https://www.intel.com/content/www/us/en/products/docs/memory-storage/solid-state-drives/data-center-ssds/storage-infrastructure-optimized-brief.html
- ServerProven for SSDs
  http://www.lenovo.com/us/en/serverproven
- Lenovo Press product guides for RAID controllers
  https://lenovopress.com/servers/options/raid
- Lenovo RAID Introduction
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