

HDD Specifications:

Type	Seagate				HGST		
	EC 2.5	EC 3.5 v5	EP 10K.6/10K.7; EP 10K.8	EP 15K.5	7K6000	He8	He10
Form Factor	2.5"	3.5"	2.5"	2.5"	3.5"	3.5"	3.5"
Capacity (TB)	1-2	1-10	0.3-1.2; 0.6-1.8	0.3-0.6	2-6	6-8	8-10
Spin speed (RPM)	7.2K	7.2K	10K	15K	7.2K	7.2K	7.2K
SATA interface (Gb/s)	6	6	-	-	6	6	6
SAS interface (Gb/s)	12	12	6; 12	12	12	12	12
Cache (MB)	128	128, 256(6/8/10 TB only)	64;128	128	128	128	256
Sector size	512e,4Kn	512n,512e,4Kn	512n; 512e,4Kn	512e,4Kn	512e	512e, 4Kn	512e, 4Kn
Sequential Performance (MB/s)	136	Up to 249	204; 241	246	Up to 227	208	Up to 249
Annual Workload (TB)	550	550	550	550	550	550	550
MTBF (million Hrs.)	1.4	2	2	2	2	2	2.5
Latency (ms)	4.16	4.16	2.9	2	4.16	4.16	4.16
Optional Encryption	FIPS 140-2,SED	FIPS 140-2,SED	FIPS 140-2,SED	FIPS 140-2,SED	FIPS 140-2,SED	FIPS 140-2,SED	FIPS 140-2,SED

SATA/SAS SSD Specifications:

Type	Intel				HGST			Micron					
	S3520	S3510	S3610	S3710	MR	MM	MH.B	1100	S610	S630	S650	S655	
Form Factor	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"	2.5"
Capacity (TB)	0.15-1.6	0.08-1.6	0.2-1.6	0.2-1.2	0.25-1.92	0.2-1.6	0.1-0.8	0.256-2	1.92-3.84	0.4-3.84	0.4-3.2	0.2-0.4	
Interface	SATA	SATA	SATA	SATA	SAS	SAS	SAS-3	SATA	SAS	SAS	SAS	SAS	
Max. Sequential R/W Performance (MB/s)	450/380	500/460	550/520	550/520	1,100/700	1,100/765	1,100/765	530/510	1,600/770	1,850/770	1,900/800	1,700/850	
Max. 4K Random R/W (IOPS)	67.5K/17K	68K/20K	84K/28K	85K/45K	130K/30K	130K/110K	130K/110K	92K/83K	190K/15K	180K/30K	200K/80K	200K/120K	
DWPD	1-1.5	0.3	3	10	2	10	25	0.43-0.18	1	3	10	25	
MTBF (million Hrs.)	2	2	2	2	2.5	2.5	2.5	1.5	2.5	2.5	2.5	2.5	
Flash	3D MLC	MLC	MLC	HET-MLC	MLC	MLC	MLC	TLC	eMLC	eMLC	eMLC	eMLC	
Optional Encryption	AES-256	AES-256	AES-256	AES-256	SED, FIPS 140-2	SED, FIPS 140-2	SED, FIPS 140-2	SED	SED	SED	SED, FIPS 140-2	SED	

PCIe/NVMe SSD Specifications:

Type	Intel				HGST	Micron				
	P3520	P3500	P3600	P3700	SN150	7100 ECO	7100 PRO	9100 PRO	9100 MAX	
Form Factor	U.2, HHHL	U.2, HHHL	U.2, HHHL	U.2, HHHL	U.2, HHHL	U.2	U.2	U.2, HHHL	U.2, HHHL	
Capacity (TB)	0.45-2	0.4-2	0.4-2	0.4-2	1.6-3.2	0.48-1.8	0.4-1.6	0.8-3.2	1.2-2.4	
Interface	NVMe	NVMe	NVMe	NVMe	NVMe	NVMe	NVMe	NVMe	NVMe	
Max. Sequential R/W Performance (MB/s)	1700/1350	2,700/1,800	2,600/1,700	2,800/2,000	3,000/1,600	2,700/1,200	2,700/1,200	2,800/2,200	2,800/2,200	
Max. 4K Random R/W (IOPS)	375K/26K	430K/28K	275K/33K	460K/175K	743K/140K	200K/6K	250K/34K	730K/200K	730K/320K	
DWPD	0.7	0.3	3	10	3	0.3	3	1	3	
MTBF (million Hrs.)	2	2	2	2	2	2	2	2	2	
Flash	3D MLC	MLC	MLC	HET-MLC	MLC	eMLC	eMLC	eMLC	eMLC	
Optional Encryption	AES-256	-	-	-	-	-	-	-	-	

Glossary:
Sector size:

Format	Logical	Physical
512n	512B	512B
512e	512B	4KB
4Kn	4KB	4KB

Flash:

	NAND	SLC	MLC	eMLC/HET-MLC	3D MLC	TLC	3D TLC
Bits/Cell		1	2	2	2	3	3
Approx. P/E Cycles		70K	18K	20-30K	5K	4.5K	20K

Encryption:

Type	Description
SED	A Self Encrypting Drive (SED) is a hard disk or a solid state drive that provides hardware-based data encryption.
FIPS 140-2	The Federal Information Processing Standard (FIPS) Publication 140-2 is a U.S. government computer security standard used to accredit cryptographic modules.
AES	Advanced Encryption Standard (AES) cipher encrypts and decrypts data in blocks of 128 bits using cryptographic keys of 128-, 192- and 256-bits, respectively.

DWPD: Drive writes per day, typically based on random write workload.

Endurance: Total bytes written over 5 year hardware life.

MTBF: Mean time between failures.

U.2: 2.5" NVMe.

Disclaimer: Technical specifications presented in this article are taken from manufacturer's website. All the information on technical specifications across product families is subject to change.