# **QuickSpecs**

## **Standard Features**

HPE MSA 2060 Storage Array	
Form Factor	2U, SFF or LFF
Number of controllers per array	2
Number of host ports per array	8
FC host connectivity	16Gb
iSCSI host connectivity	10Gb
SAS host connectivity	12Gb
Cache, per array	
Max Read cache per array	8TB
Data (read/write) cache + system memory per array	24GB
Pool Capacity	Two Pools with 1 PB each
RAID Levels supported:	RAID 0*,1, 5, 6, 10, MSA-DP+
	Notes: *Read Cache Only
Enclosures	
Expansion Drive Enclosures	0-9 enclosures
LFF/SFF array/enclosure mixing	Supported
Maximum number of drives per array enclosure	24 SFF/12 LFF
Maximum number of drives per drive enclosure	24 SFF/12 LFF
Drive enclosure interface type	12Gb SAS
Drives	
Maximum total HDDs per array	240 SFF / 120 LFF
Maximum total SSDs per array	240 SFF / 120 LFF
Max raw capacity per array enclosure	92.16TB SFF / 192TB LFF
Max raw capacity per drive enclosure	92.16TB SFF / 192TB LFF
Max raw capacity per array	921.6TB SFF / 1.92PB LFF
Drive Capacities	
SFF SSDs	960GB, 1.92TB, 3.84TB
LFF SSD	1.92TB
SFF HDDs	15K: 900GB
	10K: 600GB, 1.2TB, 1.8TB, 2.4TB
LFF HDDs	7.2K: 6TB, 8TB, 10TB, 12TB,14TB,16TB
Self-Encrypting SSDs	SFF: 960GB, 1.92TB
· · · ·	LFF: 1.92TB
Self-Encrypting HDDs	SFF: 900GB, 2.4TB
Notes: Sold in 6 Pack bundles only	LFF: 12TB
Software Features	
Thin Technologies	Thin Provisioning, Space Reclamation, Thin Rebuild
Tiering	Performance Tier, Standard Tier, Archive Tier
Replication	Snapshots (512), Volume Copy, Remote Snaps
Quality of Service	Virtual Tier Affinity
445	1 Throat Horrison

# QuickSpecs

#### Standard Features

Additional Features	
Maximum number of volumes	512
Maximum number of snapshots	512
Maximum number of hosts	512
Maximum number of initiators	1024
Customer self-installable	Yes
Customer self-repairable	Yes
Customer self-upgradeable	Yes
Health Check analytics	Yes
Energy Star Certified	Yes

# All MSA 2060 models offer a common set of valuable features Chassis

- 12 drive bay LFF or 24 drive bay SFF 2U base arrays, depending on model
- 12 drive bay LFF or 24 drive bay SFF 2U expansion enclosures, depending on model
- 12Gb SAS disk expansion protocol
- New next-generation drive carriers
- New optional locking bezel

### **Storage Controllers**

- Dual hot-swappable active/active controllers
- 4 host ports per controller, 8 host ports per array
- 16Gb Fibre Channel, 10Gb iSCSI and 12Gb SAS protocol support
- Auto negotiation
- New next-generation RAID offload ASIC and Processor
- 24GB system cache
- 12Gb SAS expansion ports
- Battery-free cache backup with super capacitors and compact flash

#### **Expansion Capacity**

- Maximum expansion of 9 drive enclosures (either LFF and/or SFF)
- Maximum of 240 SFF or 120 LFF drives
- Maximum of 921.6TB SFF / 1.92PB LFF raw capacity

### **Storage Services**

Virtual Storage

Up to two pools (1PB each)

Automated tiering v2.0

SSD read cache extension

Thin Provisioning

Volume Copy

Snapshot capability (64 snaps standard, 512 optional snapshot per array)

- Virtual Storage Disk Groups can be spanned across multiple enclosures.
- Virtual Storage RAID levels supported: 1, 5, 6, 10, MSA-DP+
- New disk group type (MSA-DP+):

Integrated sparing

Fast rebuilds

Improved sequential performance

Incremental disk group expansion