



# 4U60 Storage Enclosure

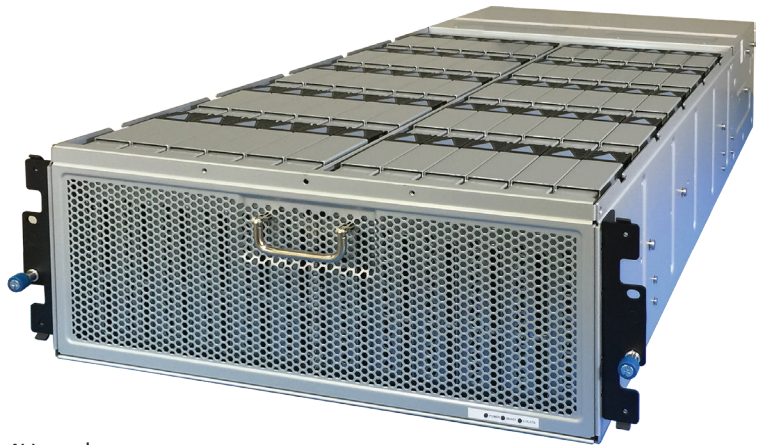


## Features

- 60 integrated Ultrastar® drive modules
  - Available with 512e or 4Kn sector size (by part number)
- Host connectivity 2 x SAS QSFP+ receptacles per IO Module; optional connectivity cables are available
  - QSFP+ to HD mini SAS cables for host
  - QSFP+ to QSFP+ cables for daisy-chaining\*
- Hot Swappable: two power supplies (with integrated fans), drive modules, and IO modules
- Fully compliant with SAS 3.0 specification for operation up to 12Gbps
- Cable management arm simplifies maintenance of hot-swappable CRUs
- SCSI Enclosure Services (SES-3)
- 5-year limited warranty on Ultrastar HDD modules, 3-year limited warranty on all other components

\*Up to 4 storage enclosures supported for daisy-chaining

The HGST 4U60 Storage Enclosure is a high-density, scalable, and cost-effective design, using 60 Ultrastar® 3.5-inch drive modules in a 4U enclosure. It offers 2x2x4-lane SAS 12GB/s performance, high availability (HA), and hot-swappable components. The design is targeted towards data centers that need a dense solution with HA capabilities, while maintaining a low power profile.



4U enclosure  
60 Ultrastar drive modules  
Available in 3 capacities<sup>1</sup>: 480TB, 360TB and 240TB

## Specifications

### Capacity / Physical Size

|                       |  |
|-----------------------|--|
| Capacity <sup>1</sup> | Up to 480TB  |
| Height                | 174.8 mm (6.88 in.) – 4 Rack Units   |
| Width                 | 424 mm (16.69 in.)   |
| Depth                 | 983 mm (38.7 in.) – including cable management   |
| Weight                | 480TB 89.81 kg (198 lbs.) – fully configured with 60 helium HDDs<br>360TB / 240TB 93.71 kg (207.6 lbs) – fully configured with 60 air HDDs |

### Power and Cooling: Operating

|   |
|---|
| Two 1650W PSUs, hot-swap and redundant                          |
| 200-240VAC auto-ranging, 47Hz-63Hz input (high line power only) |
| N+1 redundant fans (fans integrated in PSU)                     |

| Environmental     | OPERATING  | NON-OPERATING              |
|-------------------|--|----------------------------|
| Temperature range | 5° to 35°C   | -30° to 60°C               |
| Humidity          | 8% to 80% (non-condensing)                                   | 8% to 80% (non-condensing) |
| Shock             | 3.5g 6ms Pulse vertical shock                                | 8g 6ms Trapezoidal         |
| Vibration         | Random 0.25 Grms, 5-10Hz<br>0.05 g sine wave sweep, 10-300Hz | Random 0.6 Grms 10-300Hz   |
| Acoustics         | <7.5dB LwA @ 23°C  |                            |

<sup>1</sup> One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drives, the operating system and other factors.



# 4U60 Storage Enclosure

## Available Products

### 4U60 Storage Enclosure [2x2x4 SAS 12Gb/s]

| Part Number | Capacity | Sector Size | Description   |
|-------------|----------|-------------|---|
| 1ES0031     | 480TB    | 512e        | SE (Secure Erase) - Includes 60 Ultrastar He <sup>8</sup> 8TB HDD Modules             |
| 1ES0034     | 480TB    | 512e        | ISE (Instant Secure Erase) - Includes 60 Ultrastar He <sup>8</sup> 8TB HDD Modules    |
| 1ES0063     | 480TB    | 512e        | TCG (Trusted Computing Group) - Includes 60 Ultrastar He <sup>8</sup> 8TB HDD Modules |
| 1ES0033     | 480TB    | 4Kn         | SE (Secure Erase) - Includes 60 Ultrastar He <sup>8</sup> 8TB HDD Modules             |
| 1ES0035     | 480TB    | 4Kn         | ISE (Instant Secure Erase) - Includes 60 Ultrastar He <sup>8</sup> 8TB HDD Modules    |
| 1ES0058     | 360TB    | 512e        | SE (Secure Erase) - Includes 60 Ultrastar 7K6000 6TB HDD Modules                      |
| 1ES0059     | 360TB    | 512e        | ISE (Instant Secure Erase) - Includes 60 Ultrastar 7K6000 6TB HDD Modules             |
| 1ES0068     | 360TB    | 512e        | TCG (Trusted Computing Group) - Includes 60 Ultrastar 7K6000 6TB Modules              |
| 1ES0060     | 360TB    | 4Kn         | SE (Secure Erase) - Includes 60 Ultrastar 7K6000 6TB HDD Modules                      |
| 1ES0061     | 360TB    | 4Kn         | ISE (Instant Secure Erase) - Includes 60 Ultrastar 7K6000 6TB HDD Modules             |
| 1ES0054     | 240TB    | 512e        | SE (Secure Erase) - Includes 60 Ultrastar 7K6000 4TB HDD Modules                      |
| 1ES0055     | 240TB    | 512e        | ISE (Instant Secure Erase) - Includes 60 Ultrastar 7K6000 4TB HDD Modules             |
| 1ES0067     | 240TB    | 512e        | TCG (Trusted Computing Group) - Includes 60 Ultrastar 7K6000 4TB Modules              |
| 1ES0056     | 240TB    | 4Kn         | SE (Secure Erase) - Includes 60 Ultrastar 7K6000 4TB HDD Modules                      |
| 1ES0057     | 240TB    | 4Kn         | ISE (Instant Secure Erase) - Includes 60 Ultrastar 7K6000 4TB HDD Modules             |

### Cables

| Part Number | Description                         |
|-------------|-------------------------------------|
| 1EX0085     | IO Cable, HD Mini-SAS to QSFP+, 2m  |
| 1EX0094     | Expansion Cable, QSFP+ to QSFP+, 2m |

Contact your HGST Sales representative for information on how to order.

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