

Data Sheet

FUJITSU Storage ETERNUS HB5100



ETERNUS HB

FUJITSU Storage ETERNUS HB series is NVMe ready hybrid storage systems with performance and efficiency of block storage systems helping drive business value at a reduced cost. The ETERNUS HB is built for optimized for integration into existing business critical workloads like Microsoft SQL server, Oracle, SAP, etc. In addition to enhanced data protection features, a variety of APIs (REST-based), orchestration tools (Ansible), and plug-ins (Splunk, Nagios) are available for managing/monitoring HB Series systems.

ETERNUS HB5100

ETERNUS HB5100 is a midrange hybrid storage array designed with adaptive caching algorithms to address a large range of application workloads – database collaboration, VMware, video and high performance computing. Supporting multiple high speed host interfaces, including NVMe over fabric (NVMe-OF); ETERNUS HB5100 delivers over 1 million sustained IOPS and response times in sub-microseconds which benefit performance intensive and data intensive workloads. ETERNUS HB5100 support twenty-four 2.5 inch SAS HDD and/or SSD



Features & Benefits

Main Features	Benefits
Accelerates Business Applications	<ul style="list-style-type: none">■ Significantly improve the overall efficiency of IT operations while continuing to meet performance requirements from business operations.■ Accelerate write IOPS and read/write throughput with an end-to-end NVMe storage platform that's purpose-built for high-performance■ Increases performance for big data analytics applications such as Splunk by up to 2x, enabling you to search and analyze data in half the time.■ Higher performance with solid-state drives (SSDs) enables the ETERNUS HB5100 to maximize storage density, requiring fewer disks to meet your performance objectives.
Continuous availability	<ul style="list-style-type: none">■ ETERNUS HB5100 storage systems enable you to achieve greater than 99.9999% availability and provide data integrity and security■ Validates data integrity and protects against silent data corruption■ All management tasks are carried out while the storage remains online with complete read/write data access. Storage administrators can make configuration changes and conduct maintenance without disrupting application I/O.■ Background monitoring proactively scans media and tracks drive health against defined thresholds.
Flexible configuration Options	<ul style="list-style-type: none">■ A Linux-based Docker Container service to embed applications on the ETERNUS HB5100. It enables cost-effective converged infrastructure for targeted workloads. Examples include applications related to analytics, video surveillance, and HPC workloads.■ Enables the automation and agility that are needed in the DevOps-based IT revolution■ Built in a 2U or 4U enclosure, delivering the performance of over two-thousand 15,000-RPM drives while requiring under 2% of the rack space, power, and cooling the HB5100 helps significantly improve the overall efficiency of IT operations while continuing to meet performance requirements from business operations

Technical details

General system information

	Base
No. of controllers	2
No. of host interfaces	4 Port [FC (4Gbit/s)] 4 Port [FC (4, 8, 16Gbit/s)] 8 Port [FC (32Gbit/s)] 8 Port [NVMe over FC (32Gbit/s)] 12 Port [iSCSI (10Gbit/s)] 8 Port [iSCSI (25Gbit/s)] 4 Port [IB (100Gbit/s)] 4 Port [NVMe over InfiniBand (100Gbit/s)] 4 Port [NVMe over RoCE(100Gbit/s)] 8 Port [SAS (12Gbit/s)]
Maximum System Memory	128 GB
Maximum Disk Drives	120
Max. no. of drive enclosures	4
Supported RAID levels	0, 1, 1+0, 3, 5, 6, DDP
Host Interfaces	FC (4, 8,16,32Gbit/s) NVMe over FC (32Gbit/s) iSCSI (10, 25Gbit/s) IB (100Gbit/s) NVMe over InfiniBand (100Gbit/s) NVMe over RoCE (100Gbit/s) SAS (12Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	512
Maximum Storage Capacity	5,407 TB
Maximum Storage Capacity HDD	5,083 TB
Maximum Storage Capacity SSD	1,836 TB
Drive Type	2.5-inch, SAS, 10krpm (1.8TB / 1.2TB) 2.5-inch, SAS (FIPS), 10krpm (1.8TB) HDDE, Nearline SAS, 7.2krpm (12TB / 8TB / 4TB) HDDE, Nearline SAS (FIPS), 7.2krpm (10TB) 2.5-inch, SSD (15.3TB / 7.6TB / 3.8TB / 800GB) 2.5-inch, SSD (SED) (3.8TB) 2.5-inch, SSD (FIPS) (1.6TB) HDDE, SSD (800GB) HDDE, SSD (FIPS) (1.6TB)
Max. no. of SSDs	120
Mixed 2.5 inch/ 3.5 inch drive enclosures	Yes
Drive interface	12G SAS(MiniSAS HD)
Back-end disk connectivity	2/Controller
Max. no. of RAID groups per system	444
Max. no. of LUNs per RAID group	2,048
Max. no. of LUNs	2,048
Max. LUN capacity	2 PiB
Max. no. of copy generations	128

Performance management

Operation Management Client Google Chrome 47#Microsoft Internet Explorer 11#Microsoft Edge EdgeHTML 12#Mozilla Firefox 31#Safari 9

Continuity management

Remote Copy functionality	Synchronous and asynchronous
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Information security management

Data confidentiality	HTTPS (SSL), SSH, iSCSI (CHAP, Bidirectional CHAP)
Data integrity	Replace drive logically, Rebuild (DDP Rebuild, hot spare converge works), Cache Protection (Backup method, Backup data, Backup retention time: No limit), Data Encryption (Self encryption disk), Media scan, Data Assurance, T10-PI, Check Volume Redundancy

Availability management

Non-disruptive firmware upgrade	Yes
Hot part replacement	Yes

Capacity management

Thin Provisioning	Yes
Reporting function	Yes (Performance, Capacity, host connectivity)
Hot part expansion	Yes
Non-disruptive firmware upgrade	Yes

Management

Interfaces	1Gb Ethernet
Supported protocols	SNMP v2c, REST
Administration	SANtricity System Manager(GUI: Graphical user interface), SMcli(CLI: Command Line Interface), REST API, SANtricity Unified Manager

Supported OS for Management software

Operation Management Client	Google Chrome 47 Microsoft Internet Explorer 11 Microsoft Edge EdgeHTML 12 Mozilla Firefox 31 Safari 9
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Installation specification

19" rackmount	Yes		
Power voltage	AC200V / AC100V (DE460C supports only AC 200V)		
Power frequency	50 / 60 Hz		
Maximum Power Consumption	AC200V / AC100V (DE460C supports only AC 200V): Controller Shelf: 694W 2U-Drive Shelf: 423W HD-Drive Shelf: 1,486W		
Power phase	Single		
	Base	2.5 Drive Shelf	HD Drive Shelf
Dimensions (W x D x H)	480 x 483 x 85 mm 18.9 x 19 x 3.3 inch 2 U	480 x 484 x 85 mm 18.9 x 19.1 x 3.3 inch 2 U	486 x 922 x 176 mm 19.1 x 36.3 x 6.9 inch 4 U
Weight	23.5 kg (52 lb)	24.4 kg (54 lb)	112 kg (247 lb)

Environment

Maximum Heat Generation	AC200V / AC100V (DE460C supports only AC 200V): AC200 - 240V: 39937: kJ/h
Temperature (operating)	5 - 40 °C
Humidity (operating)	8 - 85 %

Compliance

Product safety	EN 60950-1, IEC 60950-1, CAN/CSA C22.2 No. 60950-1, ANSI/UL 60950-1, TP TC 004/2011, CNS14336-1
Electromagnetic Compatibility	EN55032, CISPR32, VCCI Class A, AS/NZS CISPR 22:2009+A1:2010, AS/NZS CISPR 32:2013, AS/NZS CISPR 32:2015, Class A, CNS 13438, TP TC 020/2011
Electromagnetic Immunity	EN 55032, CISPR32, VCCI Class A, AS/NZS CISPR 22:2009+A1:2010, AS/NZS CISPR 32:2013, AS/NZS CISPR 32:2015, Class A, CNS13438, TP TC 020/2011, KN32
Environmental compliance	RoHS compliant, WEEE compliant
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

Warranty

Warranty period 3 years

Warranty type Onsite warranty

Warranty Terms & Conditions www.fujitsu.com/warranty

Product Support Services - the perfect extension

Service Lifecycle 5 years after end of product life

Service Weblink www.fujitsu.com/services/product-services

Fujitsu products, solutions & services

In addition to FUJITSU ETERNUS HB5100, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Built on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offerings. This allows customers to select from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS HB5100, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/eternus

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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