

Data Sheet

Fujitsu Storage ETERNUS HB5200



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 high speed host interfaces, including NVMe 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 HB5200

ETERNUS HB5200 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 over fabric (NVMe-OF); ETERNUS HB5200 delivers over 1 million sustained IOPS and response times in sub-microseconds which benefit performance intensive and data intensive workloads. ETERNUS HB5200 supports sixty 2.5 inch or 3.5 inch NL-SAS and/or SAS HDD and/or SSD



Features & Benefits

Main Features	Benefits
Accelerates Business Applications	
	 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 HB5100 to maximize storage density, requiring fewer disks to meet your performance objectives.
Continuous availability	
	 ETERNUS HB5200 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	neattragainst defined the shous.
	A Linux-based Docker Container service to embed applications on the ETERNUS HB5200. 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 DevOpsbased 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.
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Technical details

	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	480		
Max. no. of drive enclosures	7		
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 Ethernet(100Gbit/s)		
	SAS (12 Gbit/s)		
Mixed host interfaces	Yes		
Max. no. of hosts	512		
Maximum Storage Capacity	8,640 TB		
Maximum Storage Capacity HDD	8,640 TB		
Maximum Storage Capacity SSD	1,836 TB		
Orive Type	2.5-inch, SAS, 10krpm (1.8TB / 1.2TB)		
,,	2.5-inch, SAS (FIPS), 10krpm (1.8TB)		
	HDDE, Nearline SAS, 7.2krpm (18 TB / 16TB / 12TB / 8TB / 4TB)		
	HDDE, Nearline SAS (FIPS), 7.2krpm (10TB)		
	2.5-inch, SSD (15.3TB / 7.6TB / 3.8TB / 1.6TB / 800GB)		
	2.5-inch, SSD (SED) (3.8TB)		
	2.5-inch, SSD (FIPS) (1.6TB)		
	HDDE, SSD, (1.6TB / 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	480		
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		
Compatibility note	If and to the extent a list of components or certain compatibilities are specified in the product data sheet, these		

component lists and compatibility specifications are exhaustive. Using deviating or other system components and applications together with the product may but does not necessarily have to lead to compatibility problems. A final statement and/or commitment on the compatibility of such deviating or other system components and applications can only be provided after a corresponding verification through a dedicated compatibility testing.

Performance management					
Operation Management Client	Google Chrome 47, Microsoft Ir	ternet Explorer 11, Microsoft Ed	ge EdgeHTML 12, Mozilla Firefox 31, Safari 9		
Note	Use of browser software is subject to proactive acceptance of the respective License Agreements/ EULAs of the Software manufacturer as applicable for the relevant Software whether preinstalled or optional.				
Continuity management					
Remote Copy functionality		Synchronous and asynchr	onous		
Note	The product may in connection with and depending on the specific configuration include elements to support time and performance-critical applications, however high availability (e.g., 99.9999%) and failsafe performance is not a standalone product feature. If and to the extent the product is to be used in such business-critical environments, it is within the sole responsibility of the user to set up the specific additional technical features (e.g., Storage Cluster), redundancies, and operational conditions as required to ensure such high availability or failsafe performance.				
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, Backu data, Backup retention time: No limit), Data Encryption (Self encryption disk), Media scan, Data Assurance, T10-Pl, Check Volume Redundancy				
Note	The properties of the product provide a baseline for product security and therefore end-customer IT security. However, these properties are not sufficient on their own to protect the product from all existing threats, such as intrusion attempts, data exfiltration and other forms of cyberattacks. To customize security settings, please use the configuration options as available for the respective product. During operation, the IT security of this product is within the responsibility of the respective administrator/end-user of the product. Please note, that Fujitsu as a manufacturer does not make any policy prescriptions or advocacy statements regarding IT security best practices and/or general product operation.				
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 softw	are				
Operation Management Client	Google Chrome 47 Microsoft Internet Explorer 11 Microsoft Edge EdgeHTML 12 Mozilla Firefox 31 Safari 9				
Installation specification					
19" rackmount	Yes				
Power voltage	AC200V				
Power frequency	50 / 60 Hz				
Maximum Power Consumption	AC200V: Controller Shelf: 1,777W 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)	486 x 922 x 176 mm 19.1 x 36.3 x 6.9 inch 4 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	108.5 kg (239 lb)	22.9 kg (50 lb)	106.4 kg (235 lb)		
	<u> </u>				

Note	Numbers do not include Rack Mount Kits. Rack Mount Kits increase the weight by 4 kg.		
Environment			
Maximum Heat Generation	AC200V: AC200 - 240V: 43835: 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, Class A, CNS 13438, TP TO 020/2011		
Electromagnetic Immunity	EN 55032, CISPR32, VCCI Class A, AS/NZS CISPR 22:2009+A1:2010, AS/NZS CISPR 32:2013, 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 Product Support - the perfect extension	www.fujitsu.com/warranty		
Service Lifecycle	at least 5 years after shipment, for details see https://support.ts.fujitsu.com/		
Service Weblink	www.fujitsu.com/services/product-services		

Fujitsu products, solutions & services

In addition to Fujitsu ETERNUS HB5200, 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 HB5200, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.

www.fujitsu.com/global/products/computing/storage/disk/eternus-hb/hb5200/

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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Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering. The product was developed for normal business use.

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Contact

Fujitsu Limited Website: www.fujitsu.com/eternus 2023-01-02 WW-EN