FUJITSU

Data Sheet
Fujitsu Storage ETERNUS AB5100

ETERNUS AB

FUJITSU Storage ETERNUS AB series is an NVMe ready all-flash storage systems with performance and efficiency of block storage systems offering best in class IOPS. At an affordable price point, it makes flash the new normal for all tier-1 applications in enterprise IT. The ETERNUS AB is also built for optimized integration into existing business critical workloads like Microsoft SQL server, Oracle, SAP, etc. ETERNUS AB series offers enhanced data protection features and improved business value at reduced cost. Finally, a variety of APIs (REST-based), orchestration tools (Ansible), and plug-ins (Splunk, Nagios) are available for managing/monitoring AB Series systems.

ETERNUS AB5100

The ETERNUS AB5100 all-flash array delivers high performance in a midrange AB series all-flash array. ETERNUS AB5100 all-flash array delivers ultrafast performance providing the building blocks for analytics data management that is fast, secure, efficient and future-proof. The AB5100 is an all-SSD storage system that turbocharges access to your data and increases its value. Requiring only 2U of rack space, the AB5100 all-flash array combines extreme IOPS, sub-100 microsecond response times and up to 21GBps of bandwidth with leading, enterprise-proven availability features

Features & Benefits

Main Features	Benefits
Accelerates Business Applications	■ Designed specifically for mixed-workload environments, including big data analytics, High performance computing and video surveillance. ■ 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. ■ Cuts video processing times by as much as 95% ■ ETERNUS AB5100 all-flash array helps to significantly improve the overall efficiency of IT operations while continuing to meet performance requirements from business operations
Continuous availability	■ ETERNUS AB5100 storage systems enable you to achieve greater than 99.9999% availability and provide data integrity and security ■ Extensive capturing of diagnostic data provides comprehensive fault isolation and simplifies analysis of unanticipated events ■ Drive rebuild continues even when an unreadable sector or second failure is encountered
Flexible configuration Options	■ Enables the automation and agility that are needed in the DevOps-based IT revolution, ■ Helps IT be more application responsive and agile to business needs ■ A Linux-based Docker Container service to embed applications on the ETERNUS AB5100. It enables cost-effective converged infrastructure for targeted workloads. Examples include applications related to analytics, video surveillance, and HPC workloads. ■ Protects investments in storage networks through the ability to independently scale to 1.8PB of raw flash capacity

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 (12 Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	512
Maximum Storage Capacity	1,836 TB
Drive Type	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)
Drive interface	12G SAS(MiniSAS HD)
Back-end disk connectivity	2/Controller
Max. no. of RAID groups per system	120
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 Internet Explorer 11, Microsoft Edge 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 asynchronous

Continuity management

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, iSER(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
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 software

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 / AC100V	
Power frequency	50 / 60 Hz	
Maximum Power Consumption	AC200V / AC100V: Controller Shelf: 659W 2U-Drive Shelf: 375W	
Power phase	Single	
	2.5 Drive Shelf	Base
Dimensions (W x D x H)	480 x 484 x 85 mm 18.9 x 19.1 x 3.3 inch 2 U	480 x 483 x 85 mm 18.9 x 19 x 3.3 inch 2 U
Weight	22.9 kg (50 lb)	25.1 kg (55 lb)
Note	Numbers do not include Rack Mount Kits. Rack Mount Kits increase the weight by 4 kg.	

Environment

Maximum Heat Generation	AC200V / AC100V: AC200 - 240V: 7772: 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 - the perfect extension

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 AB5100, 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 AB5100, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/global/products/computing/storage/all-flash-arrays/eternus-ab5100/

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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Disclaimer

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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