FUJITSU

Data Sheet
Fujitsu Storage ETERNUS HX2300 Hybrid Storage System

ETERNUS HX

FUJITSU Storage ETERNUS HX series is a collection of unified and massively scale-out hybrid storage systems, designed to enable your digital transformation by offering superior flexibility, continuous availability and seamless cloud-connected data management in Hybrid IT environments. ETERNUS HX series storage systems accelerate your applications while seamlessly managing your data on the edge, core and the cloud to keep your data available, protected and secure.

ETERNUS HX2300

Fujitsu Storage ETERNUS HX2300 unified hybrid storage is optimized for small and medium-sized enterprises, remote offices, and local storage which require simple deployment and operations. Optimized for high-capacity use cases, in a small 2U footprint, it can massively scale up to over 2PB and scale-out to 27PB. ETERNUS HX storage systems are optimized for easy deployment and operations and offer unified storage across block and file workloads. They have the versatility to keep up with ever-changing business needs while delivering superior performance and scalability for diverse workloads. ETERNUS HX Hybrid storage systems offer excellent flexibility to handle future growth and cloud integration, while also improving the storage efficiency and reliability of IT operations by delivering integrated data protection and security to safeguard your data.

Features & Benefits

Main Features	Benefits
Flexible and future-proof storage	■ Achieve flexible combination of flash and disk media for diverse workloads, easy management of file and block data on a single system, scale capacity and performance non-disruptively and also seamlessly cluster different ETERNUS AX and ETERNUS HX systems.
Seamless cloud-connected data management	■ Consolidate data management across on-premise storage and cloud in Hybrid IT Infrastructures, along with effortless integration with multiple public clouds – AWS, Microsoft Azure and Google Cloud.
Accelerate business applications	■ Speed up your critical applications with NVMe cache and increase data throughput for business-critical applications
Continuous availability without compromise	■ Best-in-class integrated and application-consistent data protection software to prevent data loss and accelerate recovery with space-efficient snapshots, synchronous and asynchronous replication.
Maximize storage efficiency	■ Innovative data reduction technologies help minimize storage footprint with proven efficiency technologies such as inline deduplication, compression, compaction, and thin provisioning. Efficiently meet SLAs in hybrid IT environments with secure multitenancy and adaptive quality of service (QoS). Simplify and speed up day-to-day storage management with ONTAP System Manager and optimize your storage infrastructure with predictive analytics using Active IQ.

Technical details

General system information

	Controller Shelf
No. of controllers	NAS:2-24 (HA Pair x12)
	SAN:2-12 (HA Pair x6)
No. of host interfaces	8 Port [iSCSI (25Gbit/s)]
	8 Port [iSCSI (10GBase-T)]
	8 Port [Ether (25Gbit/s)]
	8 Port [Ether (10GBase-T)]
	8 Port [NVMe-FC/FC (32Gbit/s)]
Maximum System Memory (HA pair)	128 GB
Flash Cache	2TB/HA Pair
Max. Disk Drives NAS (HA pairx12)	1,728
Max. Disk Drives SAN (HA pairx6)	864
Max. Disk Drives (HA pair)	144
Max. no. of LUNs (Cluster)	65,536
Supported RAID levels	4, 6, TEC
Host Interfaces	NVMe-FC/FC (8, 16, 32Gbit/s)
	iSCSI (1, 10, 25Gbit/s, 1, 10GBASE-T)
	Ethernet (1, 10, 25Gbit/s, 1, 10GBASE-T)
Mixed host interfaces	Yes
Max. no. of hosts	2048
Maximum Storage Capacity (HA Pair)	2,304 TB
Maximum Storage Capacity(NAS)	27.6 PB
Maximum Storage Capacity (SAN)	13.8 PB
Drive Type	2.5-inch, SAS, 10krpm (1.8TB / 1.2TB)
	2.5-inch, SAS (FIPS), 10krpm (1.8TB)
	2.5-inch, SSD (7.6TB / 3.8TB / 960GB)
	2.5-inch, SSD (FIPS) (3.8TB)
	3.5-inch, Nearline SAS, 7.2krpm (16TB / 10TB / 4TB)
	3.5-inch, Nearline SAS (FIPS), 7.2krpm (10TB)
	3.5-inch, SSD (3.8TB / 960GB)
	HDDE, Nearline SAS, 7.2krpm (16TB / 10TB / 4TB)
	HDDE, Nearline SAS (FIPS), 7.2krpm (10TB)
Mixed 2.5 inch/ 3.5 inch drive enclosures	Yes
Drive interface	12G SAS(MiniSAS HD)
Back-end disk connectivity	4/HA pair
Max. LUN capacity	128 TB
Max. no. of copy generations	1,023
Deduplication	Yes
Compression	Yes
Compaction	Yes

Performance management

Quality of Service	Yes
Operation Management Client	Google Chrome 65.0, Microsoft Internet Explorer 11.0, Mozilla Firefox 59.0

Continuity management

Metro cluster	No
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	Rebuild, Cache Protection (Backup method, Backup data, Backup retention time: No limit), Data Encryption (Software Encryption, Storage Encryption, Self encryption disk), Disk Patrol, Data Block Guard, HDD Shield, CheckSum: BCS/AZCS, Pool Diagnosis (CLI Only)
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 (capacity, health, performance, and protection relationships)
Hot part expansion	Yes
Non-disruptive firmware upgrade	Yes

Management

Interfaces	1Gb Ethernet
Supported protocols	SNMP v1/v2c/v3, REST, SMI-S
Administration	ONTAP System manager (GUI: Graphical user interface), CLI (Command Line Interface), REST API, Active IQ Unified Manager, SnapCenter

Supported OS for Management software

Operation Management Client	Google Chrome 65.0 Microsoft Internet Explorer 11.0 Mozilla Firefox 59.0

Installation specification

19" rackmount	Yes
Power voltage	AC200-240V/AC100V-120V (DS460C Support only AC200V-240V)
Power frequency	50 / 60 Hz
Maximum Power Consumption	AC200-240V/AC100V-120V (DS460C Support only AC200V-240V): Controller Shelf: 729W 2U-Drive Shelf - DS212C: 338W - DS224C: 396W HD-Drive Shelf - DS460C: 1541W
Power phase	Single

	Controller Shelf	DS212C	DS224C	DS460C
Dimensions (W x D x H)	480 x 508 x 87 mm 18.9 x 20 x 3.4 inch 2 U	480 x 505 x 87 mm 18.9 x 19.9 x 3.4 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	29.2 kg (64 lb)	28.7 kg (63 lb)	24.4 kg (54 lb)	112 kg (247 lb)
Note	Numbers do not include Rack Mount Kits. Rack Mount Kits increase the weight by 4 kg.			

Environment

Maximum Heat Generation	AC200-240V/AC100V-120V (DS460C Support only AC200V-240V): 14936: kJ/h
Temperature (operating)	10 - 35 °C

Environment	
Humidity (operating)	8 - 80 %

Compliance	
Product safety	IEC 60950-1, IEC 62368-1, EN 62368-1, ANSI/UL 62368-1, 2nd Ed, CAN/CSA C22.2 No. 62368-1-14, CNS 14336-1, TP TC 004
Electromagnetic Compatibility	EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, FCC Part-15 Subpart B Class A, ICES-003 Class A, VCCI Class A, JIS C 61000-3-2, CNS 13438, AS/NZS CISPR 32 class A, TP TC 020, KN32 Class A, KN35
Electromagnetic Immunity	EN 55035
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 HX2300, 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 HX2300, 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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