FUJITSU

Data Sheet
Fujitsu Storage ETERNUS HX6100 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 HX6100

Fujitsu Storage ETERNUS HX6100 unified hybrid storage is optimized for a wide range of midrange deployments that need a balance of capacity, performance, and price. It can massively scale up to over 11PB and scale-out to 138PB. 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

	Base
No. of controllers	NAS:2-24Node (HA Pair x12)
	SAN:2-12Node (HA Pair x6)
No. of host interfaces	32 Port [FC (16, 32Gbit/s)]
	32 Port [NVMe-FC (32Gbit/s)]
	16 Port [iSCSI (40, 100Gbit/s)]
	24 Port [iSCSI 25Gbit/s)]
	32 Port [iSCSI (10Gbit/s)]
	16 Port [iSCSI (10GBase-T)
	16 Port [Eternet (40, 100Gbit/s)]
	24 Port [Eternet 25Gbit/s)]
	32Port [Eternet 10Gbit/s)]
	16 Port [Eternet (10GBase-T)
Maximum Storage Capacity HDD (HA Pair)	11.5 PB
Maximum Storage Capacity SSD (HA Pair)	7.3 TB
Supported RAID levels	4, 6, TEC
Host Interfaces	Fibre Channel (32Gbit/s, 16Gbit/s, 8Gbit/s)
	iSCSI (100Gbit/s, 40Gbit/s, 25Gbit/s, 10Gbit/s)
	Ethernet (100Gbit/s, 40Gbit/s, 25Gbit/s, 10Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	4,096
Maximum Storage Capacity (HA Pair)	11.5 PB
Maximum Storage Capacity(NAS)	138 PB
Maximum Storage Capacity (SAN)	69 PB
Drive Type	2.5-inch, SAS, 10krpm (1.8TB / 1.2TB)
	2.5-inch, SAS (FIPS), 10krpm (1.8TB)
	2.5-inch, SSD (15.3TB / 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)
	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	8/HA Pair
Max. no. of LUNs	16,384
Max. LUN capacity	16 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	Yes
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, iSCSI (CHAP, Bidirectional CHAP)
Data integrity	Rebuild, Data Block Guard, Cache Protection, Disk Patrol, HDD Shield, Data Encryption, CheckSum: BCS/AZCS, Pool Diagnosis (CLI Only), Copy back less
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	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
Supported protocols	NFS, CIFS/SMB , iSCSI, FC
Administration	ONTAP System manager (GUI: Graphical user interface), CLI (Command Line Interface), REST API, Active IQ Unified Manager, SnapCenter

Supported OS for ETERNUS SF Express

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 (DE460C Support only AC200V-240V)
Power frequency	50 / 60 Hz
Maximum Power Consumption	AC200-240V/AC100V-120V (DE460C Support only AC200V-240V): Controller Shelf: 1,512W 2U-Drive Shelf: - DS212C: 338W - DS224C: 396W HD Shelf: - DS460C: 1,541W
Power phase	Single

	3.5 Drive Shelf	2.5 Drive Shelf	HD Drive Shelf	Base
Dimensions (W x D x H)	480 x 505 x 85 mm 18.9 x 19.9 x 3.3 inch 2 U	480 x 484 x 85 mm 18.9 x 19.1 x 3.3 inch 2 U	483 x 922 x 176 mm 19 x 36.3 x 6.9 inch 4 U	480 x 828 x 175 mm 18.9 x 32.6 x 6.9 inch 4 U
Weight	28.7 kg (63 lb)	24.4 kg (54 lb)	112 kg (247 lb)	49.2 kg (108 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 (DE460C Support only AC200V-240V): 78451: kJ/h
Temperature (operating)	10 - 35 °C
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
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

Warranty	
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 HX6100, 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 HX6100, 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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