FUJITSU

Data Sheet
FUJITSU Storage ETERNUS AF150 S3 All-Flash Array

Storage Unchained

ETERNUS AF Storage

FUJITSU Storage ETERNUS AF series are incredibly fast and flexible all-flash storage systems for the next-generation data center. At an affordable price point, it makes flash the new normal for all tier-1 applications in enterprise IT. Response times are ultra-low – in fact, they set performance records. The ETERNUS AF is also built to be smart, with easily configurable automated quality of service to ensure each app gets the performance it needs, plus flexible deduplication and compression that can be turned on when required – and off when not. It keeps data safe with full-fledged DR with mirroring and automated transparent failover.

ETERNUS AF150 S3

The Fujitsu Storage ETERNUS AF150 S3 is an affordable, entry-level all-flash storage for SMBs. This easy to deploy and manage storage system can efficiently work with large data volumes and deliver exceptional price/ performance ratio and offers comprehensive data services. It meets various business requirements with leading storage performance, seamless scalability and comprehensive data services – all at an affordable price.

Features & Benefits

Main Features	Benefits
Based on ETERNUS DX standard architecture	■ Performance optimized design ■ Proven and mature technology ■ System availability of 99.9999% ■ Common management across all-flash and hybrid ETERNUS storage systems
Flexible and flash optimized storage	■ Ultra-low response times for all applications ■ Massive increase of IOPS ■ No complicated tuning measures required ■ Scalable in capacity and connectivity
Automated Quality-of-Service	■ Control of applications priorities according to business needs. ■ Automation of monitoring and adjustment ■ Minimization of admin efforts ■ Guaranteed service levels
Storage Cluster Option/Transparent failover	■ Avoid planned or unplanned downtimes ■ Enjoy 100% data insurance and non-stop operations
Convincing access performance and latency ■ Random access performance: Up to 390.000 IOPS (8 KB Blocks) ■ Sequential access performance: Max. 5 GB/s (128 KB Blocks) ■ Latency: Less than 1 ms (4 KB Blocks)	■ Sufficient performance for all applications requiring high data rates and low response times

Technical details

General system information

	ETERNUS AF150 S3
No. of controllers	2
No. of host interfaces	4/8 ports
Maximum System Memory	32 GB
Maximum Disk Drives	24
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6
Host Interfaces	Fibre Channel (16 Gbit/s, 32Gbit/s) iSCSI (10Gbit/s [10GBASE-SR, 10GBASE-CR, 10GBASE-T])
Mixed host interfaces	Yes
Max. no. of hosts	1,024
Drive Type	2.5-inch, SSD (3.84TB / 1.92TB / 960GB)
Drive interface	Serial Attached SCSI (12 Gbit/s)
Back-end disk connectivity	1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)
Max. no. of RAID groups per system	72
Max. no. of LUNs per RAID group	128
Max. no. of LUNs	3,072
Max. LUN capacity	128 TB
Max. no. of copy generations	512

Performance

Latency	140μsec (Read), 60μsec (Write)
Sequential access performance	10,000 MB/s (128KB Read) 5,000 MB/s (128KB Write)
Random access performance	390,000 IOPS (8KB Read) 270,000 IOPS (8KB Write)

Performance management

Automated Storage Tiering	Yes
Quality of Service	Yes

Continuity management

Storage Cluster	Yes
Remote Copy functionality	Synchronous and asynchronous

Information security management

Data confidentiality	HTTPS (SSL), SSH, CHAP, Bidirectional CHAP
Data integrity	Data Block Guard, Data Encryption, Cache Protection, Disk Drive Patrol, Global Hot Spare, Dedicated Hot Spare, Copy back less, Drive shield, Fast Recovery

Availability management

Non-disruptive firmware upgrade	Yes
Hot part replacement	Yes

Capacity management

RAID migration	Yes
Hot part expansion	Yes

Management

Interfaces	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
Supported protocols	SNMP (version1, 2C, 3), SMI-S 1.4
Administration	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF

Supported OS for ETERNUS SF

Operation Management Server	Microsoft® Windows Server® 2019 Microsoft® Windows Server® 2016 Microsoft Windows Server 2012, 2012 R2 Solaris® 11 (11/11 or later) Solaris® 10 (except ETERNUS SF Express) Red Hat Enterprise Linux 8 Red Hat® Enterprise Linux® 7 Red Hat® Enterprise Linux® 6 Oracle Linux 6 VMware® vSphere® 6.0, 6.5, 6.7 Microsoft Windows Server 2019 Hyper-V Microsoft Windows Server 2016 Hyper-V Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V
Operation Management Client	Microsoft Internet Explorer 10, 11 Firefox ESR 60, ESR 68 Microsoft Edge 25, 42, 44 Google Chrome 60, 75 Chrome® 47, 50 (Android®)
Note	See the ETERNUS SF datasheet for further options

Installation specification

19" rackmount	Yes
Power voltage	AC 100 - 120 V / AC 200 - 240 V
Power frequency	50 / 60 Hz
Maximum Power Consumption	AC 100 - 120 V: 750 W (760 VA)
Maximum Power Consumption	AC 200 - 240 V: 750 W (760 VA)
Power phase	Single
	ETERNUS AF150 S3
Dimensions (W x D x H)	482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U
Weight	35 kg (77 lb)

Environment

Maximum Heat Generation	AC 100 - 120 V: 2,710: kJ/h
	AC 200 - 240 V: 2,710: kJ/h
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment link	http://docs.ts.fujitsu.com/dl.aspx?id=589915e9-1bf8-40f7-8ba4-7cac9371f2f0

Compliance

Product safety	UL 60950-1, CSA 60950-1, EN 60950-1, IEC 60950-1, TP TC 004/2011, CNS14336
Electromagnetic Compatibility	FCC Part-15 Class A, ICES-003 Class A, EN 55022 (2010), +AI, VCCI Class A, AS/NZS CISPR 22 Class A, CNS13438 (C6357) Class A, KN22
Electromagnetic Immunity	EN 55024
Environmental compliance	RoHS compliant, WEEE compliant
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
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

Support Pack Options	Available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time (depending on country) 24x7, 4h Onsite Response Time (depending on country)

Warranty

Recommended Service	24x7, Onsite Response Time: 4h
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 AF150 S3, 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 AF150 S3, 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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