FUJITSU

Data Sheet
FUJITSU Storage ETERNUS AF250 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 (except ETERNUS AF150) 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 AF250 S3

The Fujitsu Storage ETERNUS AF250 S3 is the ideal choice for application scenarios with demanding data and performance requirements. The system delivers impressive IOPS performance with lowest latency even at full load. Thus it offers a solution that resolves all performance issues in critical applications – such as real-time business analytics or VDI environments - without requiring any complicated tuning. It also fits best as general purpose storage for all Tier-1 applications in small and mid-sized companies.

Features & Benefits

Main Features	Benefits
Flexible and flash optimized storage	■ Ultra-low response times for all applications and a massive increase of IOPS without complicated tuning measures as well as scalable capacity and connectivity.
Selective use of deduplication / compression	■ Data reduction at the volume level to improve storage efficiency and increase the lifespan of flash
Automated Quality-of-Service	■ Control applications priorities according to business needs, minimize admin efforts, automate monitoring and adjustment to guarantee service levels
Transparent failover and Storage Cluster	■ Avoid planned or unplanned downtimes, enjoy 100% data insurance and non-stop business operations
Based on ETERNUS DX high-performance family architecture	■ Performance-optimized design with proven and mature technology allows system availability of 99.9999%, along with seamless management across ETERNUS AF and ETERNUS DX storage systems.
Convincing access performance and latency ■ Random access performance: Up to 600,000 IOPS (8 KB Blocks) ■ Sequential access performance: Max. 11 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 AF250 S3
No. of controllers	2
No. of host interfaces	4-16 ports [FC16Gbit/s)], 4/8 ports [FC(32Gbit/s), iSCSI(10Gbit/s,1Gbit/s)]
Maximum System Memory	128 GB
Maximum Disk Drives	264
Max. no. of drive enclosures	10
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6
Host Interfaces	Fibre Channel (16 Gbit/s, 32Gbit/s) iSCSI (10 Gbit/s [10GBase-SR, 10GBase-CR, 10GBase-T], 1 Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	1,024
Maximum Storage Capacity	8,110 TB
Drive Type	2.5-inch, SSD (30.72TB / 15.36TB / 7.68TB / 3.84TB / 1.92TB / 960GB) 2.5-inch, SSD (FIPS) (7.68TB / 3.84TB / 1.92TB)
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	132
Max. no. of LUNs per RAID group	128
Max. no. of LUNs	8,192
Max. LUN capacity	128 TB
No. of snapshots - max.	4,096
Max. no. of copy generations	512
Deduplication	Yes
Compression	Yes

Performance

Latency	140μsec (Read), 60μsec (Write)
Sequential access performance	11,000 MB/s (128KB Read) 5,300 MB/s (128KB Write)
Random access performance	600,000 IOPS (8KB Read) 480,000 IOPS (8KB Write)

Performance management

Automated Storage Tiering	Yes
Quality of Service	Yes
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®), Safari 8, 9 (iOS)

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

Thin Provisioning	Yes
RAID migration	Yes
Hot part expansion	Yes
Non-disruptive firmware upgrade	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® 2019 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®) Safari 8, 9 (iOS)
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	
Power supply efficiency	92 % (80 PLUS gold)	
Maximum Power Consumption	AC 100 - 120 V: 5,100W (5,210VA)	
Maximum Power Consumption	AC 200 - 240 V: 5,100W (5,210VA)	
Power phase	Single	
	ETERNUS AF250 S3	2.5-inch Drive Enclosure
Dimensions (W x D x H)	482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U
Weight	35 kg (77 lb)	35 kg (77 lb)

Environment

Maximum Heat Generation	AC 100 - 120 V: 18,890: kJ/h
	AC 200 - 240 V: 18,890: 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	ETERNUS AF250 S3
Model	FA-25
Product safety	UL 60950-1, CSA 60950-1, EN 60950-1, IEC 60950-1, TP TC 004/2011, CNS14336
Electromagnetic Compatibility	FCC Part-15 Subpart B Class A, ICES-003 Class A, EN 55022 (2010), +AI, VCCI Class A, AS/NZS CISPR 22 Class A, CNS13438 (C6357) Class A, KN22

Compliance

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)
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 AF250 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 AF250 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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