

DATA SHEET

ETERNUS DX400 Series Reliable Storage Solutions

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ETERNUS DX410/DX440 disk storage systems continue the Fujitsu success story in the mid-range segment. This generation of RAID systems offers a high degree of data storage reliability. In combination with proven software delivering, ETERNUS DX410/DX440 disk storage systems offer the sturdiness you need in dynamic infrastructures. It offers multi-dimensional scalability and the capability to maximize the pooling of storage resources. A rapid increase in storage capacity will be no problem, since controller power, cache and host interfaces can be easily increased. ETERNUS DX410/DX440 disk storage systems are suitable for a large range of applications. With their Eco-mode which uses the MAID technology, ETERNUS DX410/DX440 disk storage systems are some of the most energy efficient storage systems in their class.



Main features	Benefits
RAID Migration: Dynamic data transfer in running operations from LUN to LUN without interrupting operations	<ul style="list-style-type: none"> ■ Move data to fast or low-priced disks drives according to access frequency and importance ■ Use the most appropriate RAID level even if requirements change ■ Simplifies the ability to leverage new technology
Data Block Guard: Data Block Guard appends check codes to every data block and verifies them at multiple checkpoints.	<ul style="list-style-type: none"> ■ Helps to ensure maximum data integrity on disk in cache and in between ■ Guarantees consistency of all stored data
Redundant Copy: Preventative disk drive replacement, based on error threshold monitoring, ensures data redundancy	<ul style="list-style-type: none"> ■ Solves the problem of dangerously increasing recovery times within a RAID group which comes from the increasing capacity of disks drives (1 TB SATA disk drives)
Data Encryption: Optional encryption of the data on the RAID system with native 128-bit AES (Advanced Encryption Standard)	<ul style="list-style-type: none"> ■ Protection of sensitive data upon removal from storage system ■ Simple and cost effective
Eco-mode with MAID technology: (MAID = Massive Array of Idle Disks) Disk drives can be shut down by a scheduled spin-stop period or by auto spin-down	<ul style="list-style-type: none"> ■ Eco-mode conserves energy and costs
8Gbit/s Fibre Channel connection	<ul style="list-style-type: none"> ■ Higher speeds, greater storage consolidation

TECHNICAL DETAILS

ETERNUS DX400 SERIES

General specification		ETERNUS DX410	ETERNUS DX440
Host interface		Fibre Channel (Max 8 Gbit/s) or iSCSI (1 Gbit/s)	
Number of controllers		2	
Number of host interfaces	Fibre Channel	2 - 8	4 - 16
	iSCSI	2 or 4	4 or 8
Cache memory capacity		Max. 8GB	Max. 32GB
RAID levels		0, 1, 1+0, 5, 6	
Storage capacity	Physical capacity	Max. 208.4TB	Max. 418.4
	Logical capacity	Max. 146.8TB	Max. 297.2
Number of disk drives (Max.)		210	420
Drives	HDD	FC disk drives (15,000rpm)	600GB/450GB/300GB
		Nearline SATA disk drives (7,200rpm)	1TB/750GB/500GB
	SSD (Solid State Drives)	400GB/200GB	
Drive interface		Fibre Channel (4Gbit/s)	

Installation specification		ETERNUS DX410	ETERNUS DX440
Dimensions (W x D x H)	Floor stand (with expansion cabinet)	590 x 990 x 1,800 mm (1,180 x 990 x 1,800 mm)	590 x 990 x 1,800 mm (1,770 x 990 x 1,800 mm)
	Rack mount (Minimum configuration)	483 x 770 x 533 mm [12U]	483 x 770 x 533 mm [12U]
Service Area	Floor stand	Front: 850mm or more, Rear: 850mm or more, Left: 50mm or more, Right: 0mm	
	Rack mount	Front: 850mm or more, Rear: 850mm or more, Side: 0mm	
Maximum Weight	Floor stand	1,050 kg	1,820 kg
	Rack mount	760 kg	1,395 kg
Power	Voltage	AC 200 – 240 V	
	Phase	Single	
	Frequency	50 Hz / 60 Hz	
Maximum Power Consumption		7,700W (8,200VA)	14,700W (15,700VA)
Maximum Heat Generation		27,800KJ/H	53,000KJ/H
Environmental Conditions	Temperature (Operating)	5 – 35°C	
	Humidity (Operating)	20 – 80% RH	

Supported RAID levels

RAID 0	Data striping on several disk drives
RAID 1	Mirrored disk drives
RAID 1+0	Data mirroring, then striping of the data over several disk drives
RAID 5	Striping with distributed parity
RAID 6	Striping with distributed double parity

Management

Interfaces:	100BASE-TX/10BASE-T
Supported protocols:	SNMP
Administration	Web-Environment

Compliance with standards

Safety, Quality and Environmental Standards	CSA60950-1, UL60950-1, EN60950-1, IEC 60950-1, ISO9001, ISO14001, GOST-R,
Electromagnetic Compatibility	FCC Class A, CE Mark, EN55022 Class A, VCCI Class A(for Japan), AS/NZS CISPR 22 Class A (for Australia/New Zealand), BSMI Class A(for Taiwan)
Electromagnetic Immunity	EN55024

For more product information please go to <http://www.fujitsu.com/eternus>

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Fujitsu ETERNUS DX410/DX440 surpasses the highest environmental regulations within Fujitsu and are labeled as Green Product. Please find further information at <http://www.fujitsu.com/global/about/environment/>

