

# LaCie 12big Rack Fibre 8



# The Fastest Fibre Channel Storage Solution

Up to 120TB (SATA drives) / 57.6TB (SAS drives) Up to 2590MB/s (read) and 1880MB/s (write)

## The Fastest Speeds on the Market

The LaCie 12big Rack Fibre 8 is perfect for creative professionals who need to work with multiple streams of uncompressed HD video. It features four 8Gb/s Fibre Channel connections, and with active/active dual RAID controllers, it can provide enough bandwidth to support one full non-interlaced 4K video stream\* with only 12 drives. It can even reach up to 2590MB/s with expansion units.

# Totally Redundant—Totally Reliable

In addition to the 12 hot-swappable disks, dual RAID controllers, and individually-tested enclosures, its two power supplies and redundant cooling units are hot-swappable, providing the ultimate in security. Its casing adheres to SSB international standard references, delivering increased quality and affordability. With the 12big Rack Fibre 8, there is no single point of failure and a backup battery helps to ensure that cached data within the RAID controllers can even survive a power failure. And, with the 5–Year Gold Protection Plan, you receive a five-year warranty on drives and casing.

# A Total Storage Solution

The LaCie 12big Rack Fibre 8 offers the most storage, the highest speeds, and unparalleled reliability. It's the ideal solution for post-production professionals working with HD, as well as for IT managers looking for a rock-solid storage solution. With an 8Gb/s Fibre Channel interface, it's faster than ever, with performances reaching over 1200MB/s with only 12 drives. The LaCie 12big Rack Fibre 8 has 12 individually-tested enterprise class disks, supports six RAID modes, including 5, 50, and 6, and allows the user to create up to 60 cost-effective enterprise class SATA disks or 96 high-performance SAS drive disk arrays.

# Perfect for Your Office Today and Tomorrow

The 12big Rack Fibre 8 allows scalability and simple integration, since it can easily expand along with your organization. With its four Fibre Channel connections, you can share storage among four desktop machines or even integrate it into a SAN environment, as a larger solution. Its pre-configured RAID setups, remote tech support analysis capabilities, and 5-year warranty and product swap help to make it one of the best-supported, most reliable options on the market. The 12big Rack Fibre 8 can be expanded through dynamic disk array and LUN expansions, and even supports multiple disk sizes. In addition, the 12big Rack Fibre 8 comes standard with the best customer support in the industry through advance product swap, access to specially-trained tech support in your country, and escalation to the 12big Core Team if your issue isn't resolved within 24 hours.

- 1200MB/s with only 12 drives and up to 2590MB/s
- Fully redundant and reliable for post-production or IT professionals
- Dedicated, trained support in your country with 5-year warranty and product replacement
- Enterprise class drives; supports mixed SAS and SATA drive configurations



#### Minimum System Requirements

- PC or Mac® or server with a 8Gb/s Fibre Channel HBA
- Windows® Server 2003 (IA32, EM64T, IA64); RedHat Linux AS4/EL5 (IA32, EM64T, IA64); SuSE Linux 9/10 (IA32, EM64T, IA64); or Mac OS X 10.4 or higher
- Supported web browsers: Internet Explorer® 6.0 or higher, Mozilla® Firefox® 1.5 or higher, and Safari® 2.0 or higher

# The 12big Rack Fibre 8 comes with LaCie's top-of-the-line 5-Year Gold Protection Plan, which features:

- Five-year warranty on your 12big Rack Fibre 8's casing and drives
- In-house technical support in 13 subsidiaries worldwide
- 48-hour advance product replacement



# LaCie 12big Rack Fibre 8 Box Content

- LaCie 12big Rack Fibre 8 dual controller enclosure
- 2 x SFP connectors per controller
- 4 x 8Gb/s Fibre Channel LC to LC optic cables (3m)
- Rack mounting rail kit
- UK, EU, US power cords

#### LaCie 12big Rack Expansion Box Content

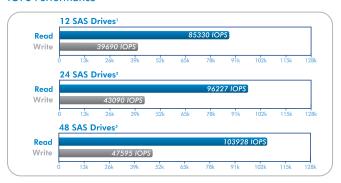
- LaCie 12big Rack Expansion dual I/O module enclosure
- SFF-8088 to SFF-8088 Mini SAS cable (2m)
- Rack mounting rail kit
- UK, EU, US power cords

# 12big Rack Fibre 8 Performance

#### **Corporate IT Applications**

#### **RAID 5 IOmeter Benchmarks**

#### **IOPS Performance**



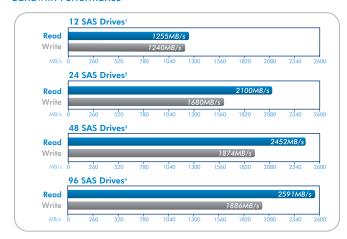
- $^1$  Cache Mirroring disabled, 2 LUNs of 6 SAS drives RAID 5 (5 + 1) (-1%), 256kB chunk size, 2 x 8Gb/s FC ports point-to-point mapped to one LUN each. IOmeter configuration: 2 worker, 2 disks, QD32
- Note: Benchmark results are the sum of 2 independent LD (comparable with OS stripe set)  $^2$  Cache Mirroring disabled, 4 LUNs of 6 SAS drives RAID 5 (5 + 1) (-1%), 256kB chunk size, 4 x 8Gb/s FC ports point-to-point mapped to one LUN each.

IOmeter configuration: 4 worker, 4 disks, QD32

Note: Benchmark results are the sum of 4 independent LD (comparable with OS stripe set)  $^3$  Cache Mirroring disabled, 4 LUNs of 12 SAS drives RAID 5 (11 + 1) (-1%), 256kB chunk size,  $4 \times 86b/s$  FC ports point-to-point mapped to one LUN each. | Ometer configuration: 4 worker, 4 disks, QD32

Note: Benchmark results are the sum of 4 independent LD (comparable with OS stripe set)

#### **Bandwith Performance**



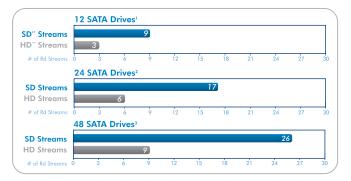
 $^4$  Cache Mirroring disabled, 4 LUNs of 24 SAS drives RAID 5 (23 + 1) (-1%), 256kB chunk size, 4 x 8Gb/s FC ports point-to-point mapped to one LUN each. 
IOmeter configuration: 4 worker, 4 disks, QD32

Note: Benchmark results are the sum of 4 independent LD (comparable with OS stripe set)

#### **Video Applications**

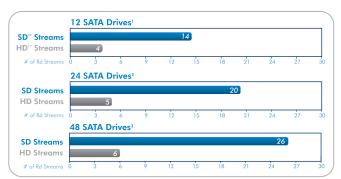
#### Final Cut Pro®

#### **Direct-Attached**



- $^{\rm 1}$  1 LUN of 12 SATA drives RAID 5, 64kB chunk size, 2x 8Gb/s FC ports point-to-point mapped to the LUN.
- <sup>2</sup> 2 LUNs of 12 SATA drives RAID 5, 64kB chunk size, 2x 8Gb/s FC ports point-to-point mapped to one LUN each.
- $^3$  4 LUNs of 12 SATA drives RAID 5, 64kB chunk size, 2x 8Gb/s FC ports point-to-point mapped to one LUN each.

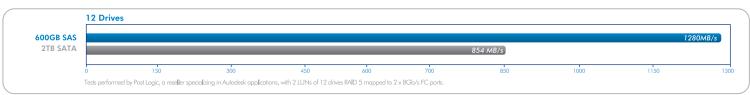
#### **XSAN**



- <sup>1</sup> 1 LUN of 10 SATA drives RAID 5 for data and 1 LUN of 2 SATA drives RAID 1 for metadata, 64kB chunk size, 3x 8Gb/s FC ports point-to-point mapped to one LUN acch
- <sup>2</sup> 2 LUNs of 10 SATA drives RAID 5 for data and 1 LUN of 4 SATA drives RAID 10 for metadata, 64kB chunk size, 3 x 8Gb/s FC ports point-to-point mapped to one 11 IN acc.
- $^3$  3 LUNs of 13 SATA drives RAID 5 for data and 1 LUN of 9 SATA drives RAID 10 for metadata, 64kB chunk size, 4 x 8Gb/s FC ports point-to-point mapped to one LUN each

#### **Autodesk's Smoke**

The 12big Rack Fibre 8 delivers outstanding results with Autodesk® Smoke (offline, online, and graphics on Linux or Mac).



# Case Studies How the 12big Rack Fibre 8 Can Work for You



## A Creative Suite Storage Solution

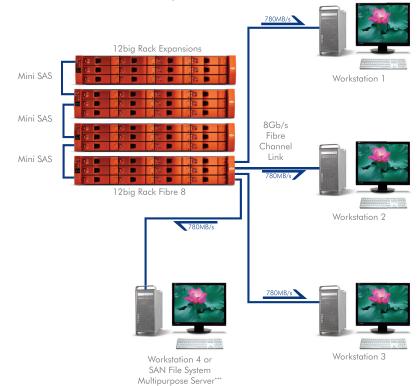
- One workstation attached to one 12big Rack Fibre 8 enclosure
- 4 x 8Gb/s fibre host bus adaptor connection for enhanced transfer speeds
- Scalable storage up to five enclosures
- Media accessed by one user

# Centralized Media / SMB Post-Production SAN

- Four workstations attached to three 12big Rack Fibre 8 enclosures
- 1 x 8Gb/s fibre host bus adaptor connection per user
- Scalable storage up to five enclosures

12big Rack Expansions

- Independent project media accessed by four users simultaneously
- You may also replace one workstation with a multipurpose server and retrieve your shared media via a SAN file system



# Mini SAS Mini S

# **Enterprise Post-Production SAN**

- Multiple workstations and one server attached to five 12big Rack Fibre 8 enclosures via multi-port Fibre Channel switch
- Up to 4 x 8Gb/s fibre host bus adaptor connections per user depending on switch port availability
- Five full capacity enclosures
- Shared media via SAN file system

# LaCie 12big Rack Fibre 8 Accessories:

Accessory Name	Item #	Description	
FC/RAID controller	131094	LaCie 12big Rack Fibre 8 FC/RAID controller (for replacement)	
SATA spare drive	131003	LaCie spare 1TB 12big Rack enterprise drive with drawer	
SATA spare drive	131004	LaCie spare 2TB 12big Rack enterprise drive with drawer	
SAS spare drive	131064	LaCie spare 600GB SAS 12big Rack drive with drawer	
Power and cooling module	131095	LaCie 12big Rack Fibre 8 rescue power and cooling module	
Spare battery	131096	LaCie 12big Rack Fibre 8 spare battery	
FC cables	131014	LaCie 10m FC cables (LC connectors)	
Snapshots	131018	StorView Snapshot licenses on 12big Rack Fibre 8	

# LaCie 12big Rack Fibre 8

Capacity▼	7.2TB SAS enterprise class drives	12TB SATA enterprise class drives	24TB SATA enterprise class drives		
ltem Number	131093	131091	131092		
External Interface	4 x 8Gb/s Fibre Channel per controller point-to-point, loop and fabric (switched) topologies				
Supported Hosts	256, 512 LUNs, LUN Masking, >2TB LUNs				
Expansion	up to 4 LaCie 12big Rack Expansions for SATA drives and 7 for SAS drives can via Mini SAS (SFF-8088) connections				
Total Number of Disks	up to 60 SATA drives or 96 SAS drives				
Total Expansion Capacity	120TB SATA drives 57.6TB SAS drives				
Disk Drives	Interface types: SAS (3Gb/s), SATA-II (3Gb/s) dedicated bandwidth to each drive Max drives per enclosure: 12, 512 logical drives/system, automatic bad sector assignment				
System Management	Software: StorView, StorView Path Manager, Snapshot Interfaces supported: Ethernet (out-of-band)				
Dimensions	Height: 87.9 mm (3.46") 2 EIA units Width: 443 mm (17.44") IEC rack-complic		Depth: 576.8 mm (22.71") Weight: 27 kg (59 lbs.) dual controllers with drives		
Electrical	Voltage: 100-240 V AC @ 50/60 Hz singl Input Current: 6.0A (115 VAC), 3.0A (230	1 /1	Input Power: 300W typical		
Environmental: Operating	Temperature: 5° to 40°C (41° to 104° F) Humidity: 8% to 80% non-condensing Altitude: 0 to 3045 m (0 to 10,000')	Vibration: random 0.21	Shock: 5g 10ms 1/2 sine Vibration: random 0.21 grms 5-500Hz Acoustics: <58 dB LpA @20° C		
Environmental: Non-Operating	Temperature: 1° to 50°C (33.8° to 122° F Humidity: 8% to 80% non-condensing Altitude: 0 to 12,192m (0 to 40,000')		Shock: 30g 10ms 1/2 sine (test without drives) Vibration: random 1.04 grms 2-200Hz (test without drives)		
Warranty	5-year warranty, product swap and dedicated local support team				

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<sup>\*4</sup>k=4096 x 2160 pixels, 12-bit resolution, 24 FPS ~ 956 MB/s.

<sup>\*\*\*</sup> Video bit rate: for read test purposes it has been defined that SD is uncompressed 8-bit 25FPS (720X576) = 21Mb/s. HD is uncompressed 8-bit 422 25FPS (1920X1080P) = 104Mb/s. As such, if lower resolutions are used more streams could potentially be supported. External - for write test purposes it has been defined that HD is uncompressed 10-bit 4:2:2 25FPS (1920X1080P) = 210Mb/s. This will require an external HD source to generate the video.

\*\*\*\* Recommended for optimal performance in configurations, but not required for purchase.

\*\*\*TIB= 1000GB. 1GB = 1000MB. 1MB = 1,000,000 Bytes. Total accessible capacity varies depending upon operating environment (typically 10% less). Capacity and cache memory vary depending upon RAID mode.