Pliant Technology

Pliant Lightning™ Enterprise Flash Drives

Do more for less—unparalleled performance and reliability for demanding enterprise-class storage

Life in the data center has become even more challenging. Many managers are tasked with the impossible—satisfying IT system performance demands without making significant new IT capital investments or bearing the cost burden of increasing floor space. By replacing many high RPM HDDs with a few Pliant Lightning Enterprise Flash Drives (EFDs), data centers can realize significant cost savings and improved performance flexibility, while substantially reducing capital, space and energy requirements. Pliant Lightning EFDs exceed the expectations of stringent global IT green initiatives.

The Pliant Lightning family of EFDs is available in 3.5-inch and 2.5-inch standard form factors, capacities from 150GB to 300GB and all with Serial Attached SCSI (SAS) interface to fit a range of storage and server systems requirements.

Pliant Technology provides two sizes and three models of EFDs:

Lightning 3.5-inch (LS) EFD

- Lightning LS 300S
- Lightning LS 150S

Lightning 2.5-inch (LB) EFD

- Lightning LB 150S

Pliant's Lightning EFD product family is based on an advanced controller design and software architecture that delivers dramatic I/O performance and reliability improvements over existing SSD technology, and exponentially higher performance and lower energy consumption than traditional high performance hard drives found in enterprise computing environments.

LIGHTNING ENTERPRISE FLASH DRIVES PROVIDE

High Performance enables more I/O performance and flexibility to meet peak periods and growing demands.

Green IT A single Lightning EFD can replace more than 100 HDDs, maximizing performance and saving on energy and space.

Reliability Lightning EFDs deliver superior data and device reliability than HDDs—there are no moving parts.

Low TCO Significant cost savings by replacing many 10K/15K RPM HDDs with Lightning EFDs to create a lower cost system with dramatically reduced operating costs.

FEATURES

- **Most Advanced Enterprise Flash Drive (EFD)**
  Pliant Lightning family is designed to satisfy both the high reliability and performance needs of enterprise-class storage in industry-standard form factors and interface requiring no infrastructure changes
- **Industry Leading Performance**
  Delivers more IOPs and bandwidth per drive with predictable, sustained performance
- **Unequalled Reliability**
  Designed for reliability with end-to-end data protection, advanced data management and more features to provide long life and superior data safeguards

BENEFITS

- Capacities up to 300GB
- Industry standards form factors
- Fits existing storage systems and servers
- No software changes required
- No batteries or super-caps to maintain

For more information, visit www.plianttechnology.com

PRODUCT SPECIFICATIONS

Interface, Capacity, and Memory Technology	Lightning LS	Lightning LB
Host Interface	SAS, 3Gbps	SAS, 3Gbps
Interface Ports	2 (full duplex)	2 (full duplex)
User Capacities	300GB (LS 300S) 150GB (LS 150S)	150GB (LB 150S)
Sector Sizes Supported	512, 520, or 528 bytes per sector	512, 520, or 528 bytes per sector
Flash Memory Technology	SLC NAND	SLC NAND

Performance (Typical)	Lightning LS	Lightning LB
Data Throughput (Read / Write)	Read > 525 MB/sec Write > 340 MB/sec	Read > 420 MB/sec Write > 220 MB/sec
Total IOPS	>160,000 IOPS	>120,000 IOPS

Physical Dimensions	Lightning LS	Lightning LB
Height (max)	26.1 mm	15.0 mm
Width (max)	101.6 mm	69.85 mm
Length (max)	147.0 mm	100.45 mm
Weight	0.6 Kg	0.2 Kg

Power Consumption	Lightning LS	Lightning LB
Idle	3.9 watts	3.9 watts
Typical	7.9 watts	5.9 watts

Reliability	
No Write Cache	No risk of data loss
Read Endurance	Unlimited
Write Endurance	Unlimited
Unrecovered Error Rate	<1 sector in 1 E10-17 bits read
End-to-End Data Protection	Yes, including T10 DIF (SCSI PI) support
Patrol Read (automatic)	No performance impact
Power-on Hours	8760 hours per year
MTBF	2 million hours

Environment	
Operating Temperature (ambient)	0 to 60° C
Non-operating Temperature	-40 to 85° C
Start-up time (Power On to Ready)	<30 seconds

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Pliant Technology, Inc.
630 Alder Drive, Suite 202
Milpitas, CA 95035

408-321-0320 Tel
408-321-0330 Fax

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