

# ExaDrive® DC

# **Highlights**

- 100 TB, 50 TB, 32 TB, and 16 TB capacities
- SATA-3 6.0 Gbps interface
- 3.5" industry standard form factor
- Unlimited write endurance for 5 years
- 8W/16W power consumption (idle/active)
- Up to 114,000/105,000 IOps reads/writes
- Up to 500/460 MBps reads/writes

# **Advantages**

- World's highest capacity SSD
- World's most energy efficient SSD
- Only SSD with unlimited write endurance for 5 years
- 6x more capacity than the largest HDD
- Uses 85% less power, cooling, and space
- 42% lower TCO over 5 years than competing SSDs
- Plug-and-play with existing 3.5" HDD slots

# **Applications & Workloads**

- Artificial intelligence
- Technical computing
- Digital imaging/media
- Cloud infrastructure
- IoT and edge storage



# The Premier Enterprise SSD for Big Data Workloads

Artificial intelligence, scientific research, cloud computing, and ever-richer digital content demand massive storage capacity and exceptional performance. At the same time, organizations are grappling with growing power, space, and cooling costs. Compounding the problem is the massive amount of data being generated at the edge, creating new challenges in data transport and migration. As the world's highest capacity and highest density SSD, ExaDrive DC is purpose-built to meet these challenges. ExaDrive DC offers capacity, energy efficiency, and endurance unrivaled in the market, thanks to an innovative, patent-pending architecture.

With capacities ranging from 16 TB to 100 TB, ExaDrive DC offers up 12x the capacity of the next largest SATA SSD on the market while consuming 85% less power per TB. With its industry-standard 3.5" form factor, ExaDrive DC is plug-and-play compatible with virtually all existing SATA and SAS-based servers, preserving existing investments and facilitating HDD-to-flash migration. With enterprise-grade flash, multiple ECC engines, and end-to-end data protection, ExaDrive DC provides unlimited write endurance for 5 years, a first-and-only in the industry, giving you peace of mind. ExaDrive DC packs massive capacity in a small package, ideal for IoT applications, mobile and tactical use cases, e-discovery, and cloud migration.



# **Direct Savings**

- Unlimited 5 year endurance
- Space savings
- Power reduction
- Higher utilization rates
- Cooling savings
- Improved storage efficiency

#### **Indirect Benefits**

- Reduced software costs
- Reduced server costs
- Increased scalabily
- Chassis standardization
- Superior reliability
- Performance gains

#### **Unlimited 5 Year Endurance**

Only ExaDrive DC offers unlimited 5 year endurance, meaning lower TCO than other endurance-limited SSDs.

#### **Space Savings**

At 100 TB, ExaDrive DC enables 6:1 space reduction versus 16 TB HDDs, reducing overall rack needs by 88%.

#### **Power Reduction**

ExaDrive DC draws as little as 85% less power per TB than nearline HDDs or competing SSDs, reducing TCO.

#### **Higher Utilization Rates**

Faster IO means utilization rates can be improved to 90%+ versus typical 60% with HDDs, an increase of 50%.

#### **Cooling Savings**

ExaDrive DC requires up to 75% fewer BTU's of cooling per TB than nearline HDDs or competing SSDs.

#### **Improved Storage Efficiency**

Unlike HDDs, SSDs are fast enough to support inline dedupe/compression, reducing storage cost even further.

#### **Reduced Software Costs**

ExaDrive DC and its high capacity allow you to reduce the number of servers, reducing software licensing costs.

#### **Reduced Server Costs**

High capacity SSDs reduce server and enclosure count (and cabling) while improving CPU efficiency.

#### **Increased Scalability**

ExaDrive DC lets you maximize storage capacity and scalability while reducing data center costs.

#### **Chassis Standardization**

ExaDrive DC is 3.5" SATA, just like HDDs, so you can avoid costly server and JBOD hardware upgrades.

### **Superior Reliability**

ExaDrive DC has no moving parts, provides unlimited 5 year endurance, and delivers faster RAID rebuilds.

#### **Performance Gains**

With 98% lower latency than nearline HDDs, time-to-data is slashed, improving the user experience.

	EDDCT016	EDDCT032	EDDCT050	EDDCT100
Basics				
Capacity	16 TB	32 TB	50 TB	100 TB
Interface	SATA-3 (6.0 Gbps)			
Form Factor	3.5" (LFF)			
Reliability				
Endurance	Unlimited DWPD for 5 years			
MTBF (hours)	2.5 million hours			
Limited Warranty	5 years			
Performance				
Latency	0.1 ms	0.1 ms	0.1 ms	0.05 ms
Random Read (4 KB)	97K IOps	97K IOps	97K IOps	114K IOps
Random Write (4 KB)	91K IOps	91K IOps	91K IOps	106K IOps
Sequential Read	500 MBps	500 MBps	500 MBps	500 MBps
Sequential Write	460 MBps	460 MBps	460 MBps	460 MBps
Power				
Active Read Power	12.1 W	12.2 W	12.1 W	15.2 W
Active Write Power	13.1 W	13.2 W	13.8 W	16.8 W
Idle Power	6.8 W	7.2 W	7.2 W	11.1 W
Active Read Power / TB	0.76 W	0.38 W	0.24 W	0.15 W
Active Write Power / TB	0.82 W	0.41 W	0.28 W	0.17 W
Idle Power / TB	0.43 W	0.23 W	0.14 W	0.11 W
Additional Details				
Temperature (operating)	0 - 60 degrees C			
Size (L x W x H)	147.0 mm x 101.8 mm x 26.1 mm			
Weight	382 grams (0.84 lb)	440 grams (0.97 lb)	533 grams (1.18 lb)	533 grams (1.18 lb)

Nimbus Data, Inc.

5151 California Ave, Ste 100 Irvine, CA 92617 www.**nimbusdata**.com (877) 6-NIMBUS

