

TerraMaster D16 Thunderbolt3

16-Bay Professional-Grade RAID

Datasheet



TerraMaster's 16-bay D16 Thunderbolt 3 is compatible with 3.5" SATA disks and 2.5" SSDs, allowing professionals to capitalise on a total storage capacity of up to 256TB. As a result, you can be assured the device gives you the tools you need to overcome any storage challenge.

Lightning-Fast

Drawing on a pair of Thunderbolt 3 interfaces (40 Gbps) and a hardware RAID controller, the D16 Thunderbolt 3 can operate at transfer speeds of 2100 MB/s under a 7200 RPM high-speed hard disk and RAID 0 array mode. Under RAID 5, the device can achieve a speed of 1800 MB/s.

Enjoy Rapid Video Workflows

The time needed for virtually every aspect of the post-production workflow falls when using the D16 Thunderbolt 3. At lightning speed, users can transfer several hours of footage from a Blackmagic® device to Adobe® Premiere Pro. In turn, with uncompressed HD 10-bit and 12-bit video, users can edit the ProRes 422 (HQ), ProRes 4444 XQ, and other data streams. Thumbnails and preview rendering are significantly more responsive when using large items with numerous high-definition clips.

High Scalability

Using one cable, Thunderbolt 3 enables users to daisy-chain more than five devices to their computer. As a result, users can achieve an enormous 1,500 TB capacity by linking together six D16 Thunderbolt 3 devices.

Thunderbolt 3 and Thunderbolt 2 Compatibility (for Mac only)

If your Mac has Thunderbolt 3 and Thunderbolt 2 ports, you can capitalise on the D16 Thunderbolt 3 to achieve high-end transfer rates. With Apple's Thunderbolt 3 (USB-C) to Thunderbolt 2 adapter (not sold with the D16 Thunderbolt 3), compatibility between the D16 Thunderbolt 3 and earlier Thunderbolt technologies is straightforwardly achieved.

Perfectly Suited for the Most Demanding Video Professionals

With its aluminium casing, metal build, and 120-mm inbuilt temperature-controlled smart fans, full heat dissipation of the D16 Thunderbolt 3 is assured for those video professionals working long hours.

Create the Smartest Workspace

A key feature of Thunderbolt 3 is its bandwidth capacity, which has been doubled since Thunderbolt 2. At the same time, the D16 Thunderbolt 3 benefits from a HD DP digital interface and a pair of Thunderbolt 3 interfaces. By daisy-chaining two 4K displays (or one 5K display) to the D16 Thunderbolt 3, users can augment their workspace in the smartest and most suitable way for their professional needs. Additionally, using Thunderbolt 3 connections, users can even power a compatible notebook computer.

Multiple RAID Supports

The D16 Thunderbolt 3 can operate with RAID 0, 1, 5, 50, and 10, as well as JBOD disk array modes for all your application needs. This underpins the all-important concern for guaranteed data security, and it ensures that your storage capacity is utilised in the most efficient way possible.

Professional and Safe

Replacing lost content is inconvenient, costly, and, ultimately, unworkable for all professionals. Therefore, with the D16 Thunderbolt 3, TerraMaster has not comprised on its use of state-of-the-art storage technologies to ensure data safety and security. Now, freed from concerns about inadequately protected data, users can focus on what matters to you.

Compatible with multiple arrays in one device	Online RAID Level Migration (ORLM)
RAID Online Capacity Expansion (OCE)	Compatible with hot swapping and hot plugging
Automatic drive (insert / removal) detection	Supports hot spare disk
Hard disk NCQ (native command sort) technology	Flash cache
Automatic RAID rebuild	Multiple RAID initialization types
SHI (Storage Health Inspector – S.M.A.R.T.)	Verifies RAID for bad sectors and parity check
Regular and automatic hard drive checks	Bad sector repair and remapping
Spin down idle mode	Alert notifications via email
Staggered drive spin up	Event log



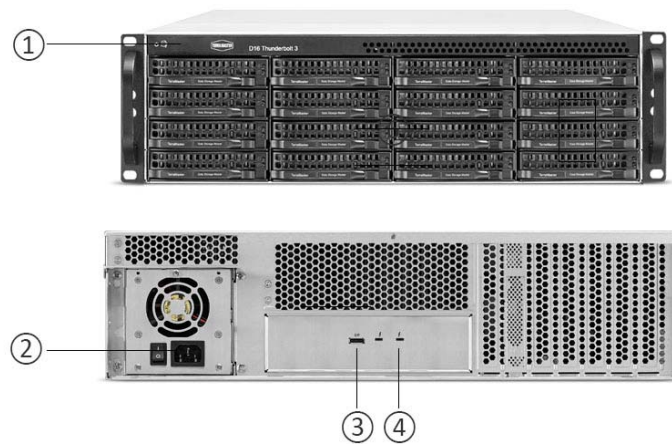
The Ideal Companion for All Professionals

Given its compactness, its large storage capacity, and its lightning speed, the D16 Thunderbolt 3 is ideally suited for the most demanding applications, including 4K video editing, as well as seamless 4K streaming. Other users, especially those with strict speed and storage requirements, will find a valuable partner in this device.

Authoritative Quality Certification

Both Apple and Intel have certified the D16 Thunderbolt 3's design and performance, ensuring the device's consistent performance and reliability.

Panel Illustration:



SN	Item	Item
①	Power Switch /Power indicator	Short press once to power on, and press for 3 seconds to power off. Off: Powered off. Green light: Powered on. Red light: Sleeping.

Rear Cover Illustration:

SN	Item	Description
②	Power Jack	Power input interface.
③	DP Port	Use this to connect the DP monitor.
④	Thunderbolt 3 interface	Use this to connect a computer or another Thunderbolt 3 device.

Specifications:

Storage	
Disk Slot Number	16
Compatible Disk Types	3.5" SATA HDD
	2.5" SATA HDD
	2.5" SATA SSD
File System	FAT 32, FAT 16, NTFS, and EXT4
Maximum Internal Raw Capacity	256TB (16 TB drive x 16) (Capacity will vary along with the RAID type)
RAIDs Supported	SINGLE DISK、JBOD、RAID 0、RAID 1、RAID5、RAID50、RAID10
Hardware RAID	√
RAID Manager Software	√
RAID Manager Software Language	English, Chinese, Japanese
RAID Online Expansion	√
RAID Migration	√
RAID Auto-rebuilding	√
Drive Hot Swap	√
HDD Sleep	√
HDD S.M.A.R.T. Inspection	√
Sector Inspection and Parity Check	√
SSC Cache	√
Daisy Chain	√
HDD NCQ Technology	√
Alert Notice	√
Event Log	√
External Ports	
Thunderbolt	40Gb Thunderbolt 3 x 2
DP Interface	DP 1.2 x 1
Power Socket	AC IN 220V
Reading/writing Speed (max.)	
Reading Speed (max.)	Read: 2100MB/sec
Writing Speed (max.)	Write:1800MB/sec (Use SSD under RAID 0 mode)
Appearance	

Size (H*W*D)	440 x 550 x 136 mm
Packaging Size (H*W*D)	710 x 580 x 270 mm
Others	
System fan	120 x 120 x 38 mm (x 3)
Fan mode	Smart
Noise Level	35dB(A)
Power Supply	
Power Supply	550W
AC Input Voltage	100V to 240V AC
Current Frequency	50/60 HZ, Single Phase
Power Consumption	210W(Access)
Environment Temperature	
Working Temperature	5°C ~ 40°C (40°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-5°F ~ 140°F)
Relative Humidity	5% ~ 95% RH
Supported OS	Windows OS、 Mac OS
Warranty	2 years
Certificate	CE, FCC, CCC, KC
Environment	RoHS compliance
Package Contents:	Host unit (x1)
	Power cord (x1)
	Thunderbolt cable (40Gbps) * 1
	Quick Installation Guide (x1)
	Screws (several)
	Limited Warranty Note x 1

TerraMaster Technology Co., Ltd.

2-A1, Building A, Zhangkeng Industrial Park, Minkang Road, Shenzhen China.

Website: www.terra-master.com

Email: sales@terra-master.com

Tel: +86 755 81798555

Copyright© TerraMaster 2019, All Rights Reserved. TerraMaster, the TerraMaster logo are trademarks or registered trademarks of TerraMaster Technology Co., Ltd. Other product and company names mentioned herein may be trademarks of their respective companies. TerraMaster may make changes to specification and product descriptions at anytime without notice.

Copyright© TerraMaster 2019, All Right Reserved