# Dell Datacenter Agnostic R.I. NVMe Drive 

 Technical Specifications and InformationNotes, cautions, and warnings
(i) NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
|WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

## Technical Specifications and Information

Use these specifications and model-specific information to ensure optimal functioning of your Dell Datacenter Agnostic Read Intensive NVMe drive.

Table 1. Technical specifications

| Features | Dell Datacenter Agnostic Read Intensive NVMe drive |
| :---: | :---: |
| Media type | 3D TLC NAND |
| Capacities or form factors | $\begin{array}{\|l} 960 \mathrm{~GB} \text { U. } 2 \\ 1.92 \text { TB U. } 2 \\ 3.84 \text { TB U. } 2 \\ 7.68 \text { TB U. } 2 \end{array}$ |
| User-addressable 512-byte sectors | 960 GB: $1,875,385,008$ 1.92 TB: $3,750,748,848$ 3.84 TB: $7,501,476,528$ 7.68 TB: $15,002,931,888$ |
| Host bus interface | PCle Gen $4.0 \times 4$ |
| FIPS Support | No |
| Device protocol | NVM Express 1.3c |
| TCG support | TCG Storage Security Subsystem Class: Opal Specification Version 2.0 |
| Instant Secure Erase (ISE) support | National Institute for Standards and Technology (NIST) Special Publication 800-88 Revision 1, Guidelines for Media Sanitization. |
| Multiple namespaces support | Yes, up to 16 |
| Bootable device | Yes, UEFI mode only |
| Surprise removal support | Yes |
| Endurance rating (TBW) | 960 GB: 1 DWPD, 1,752 TB <br> 1.92 TB: 1 DWPD, 3,504 TB <br> 3.84 TB: 1 DWPD, 7,008 TB <br> 7.68 TB: 1 DWPD, 14,016 TB |
| Data retention at maximum rated endurance as per JEDEC requirements | 3 months at $40^{\circ} \mathrm{C}$ |
| Power | $12 \mathrm{~V}, 3.3 \mathrm{~V}$ aux, supply rail 5.0 W idle, typical 25 W active, max |

Table 1. Technical specifications (continued)

| Features | Dell Datacenter Agnostic Read Intensive NVMe drive |
| :---: | :---: |
| Operating temperature | $0^{\circ} \mathrm{C}-70^{\circ} \mathrm{C}$, operating temperature |
| Physical dimensions <br> (width $\times$ length $\times$ thickness) | $69.85 \mathrm{~mm} \times 100 \mathrm{~mm} \times 14.75 \mathrm{~mm}$ |
| Weight | $150 \mathrm{~g}+/-15$ TB |
| Shock | 1,500G, Duration 0.5 ns |
| Vibration | 20G, 20~2KHz |
| IOPS, 4K random read | 960 GB: up to 555,000 IOPS <br> 1.92 TB: up to 975,000 IOPS <br> 3.84 TB: up to $1,300,000$ IOPS <br> 7.68 TB: up to 1,190,000 IOPS |
| IOPS, 4K random write | 960 GB: up to 70,000 IOPS 1.92 TB: up to 125,000 IOPS 3.84 TB: up to 160,000 IOPS 7.68 TB: up to 150,000 IOPS |
| Sequential read | $\begin{aligned} & 960 \mathrm{~GB}: 5.9 \mathrm{~GB} / \mathrm{s} \\ & 1.92 \mathrm{~TB}: 6.2 \mathrm{~GB} / \mathrm{s} \\ & 3.84 \mathrm{~TB}: 6.2 \mathrm{~GB} / \mathrm{s} \\ & 7.68 \mathrm{~TB}: 6.2 \mathrm{~GB} / \mathrm{s} \end{aligned}$ |
| Sequential write | 960 GB: 1.4 GB/s 1.92 TB: $2.6 \mathrm{~GB} / \mathrm{s}$ 3.84 TB: $4.1 \mathrm{~GB} / \mathrm{s}$ 7.68 TB: 3.6 GB/s |


| Features | Dell Datacenter Agnostic R.I. NVMe drive |
| :--- | :--- |
| Latency 4K random read | $960 \mathrm{~GB}: 60 \mu \mathrm{~s}$ |
| (1 queue depth) | $1.92 \mathrm{~TB}: 60 \mu \mathrm{~s}$ |
|  | $3.84 \mathrm{~TB}: 60 \mu \mathrm{~s}$ |
|  | $7.68 \mathrm{~TB}: 60 \mu \mathrm{~s}$ |
| Latency 4K random write | $960 \mathrm{~GB}: 14 \mu \mathrm{~s}$ |
| (1 queue depth) | $1.92 \mathrm{~TB}: 14 \mu \mathrm{~s}$ |
|  | $3.84 \mathrm{~TB}: 14 \mu \mathrm{~s}$ |
|  | $7.68 \mathrm{~TB}: 14 \mu \mathrm{~s}$ |

## Minimum supported operating systems

(i) NOTE: Supported on all operating systems using the included native drivers.

- Microsoft
- Windows Server 2022
- Windows Server 2019
- Windows Server 2016
- Linux
- Red Hat Enterprise Linux 8.0
- Red Hat Enterprise Linux 7.6
- SUSE Linux Enterprise Server 15
- Ubuntu
- Ubuntu 18.04
- Ubuntu 20.04
- VMware
- ESXi 7.0
- ESXi 6.7

