

# ENTERPRISE D-SERIES

## FEATURE-RICH PCIE GEN 5

## ENTERPRISE STORAGE

## SOLUTIONS

MiPhi's ultra-capacity MP-D205V data center SSD achieves a 4-to-1 capacity advantage over disks, enabling larger datasets per server and reducing OPEX cost. Available in 122.88TB, the MP-D205V read-intensive SSD combines Phison's industry-leading X2 controller and the latest 2TB 3D QLC technology to achieve unequaled 14,700 MB/s sequential read and 3,000K IOPS random read performance.

Discarding data is no longer an option in the artificial intelligence era. AI requires a combination of warm and cold data for machine learning to build new models to predict future events and trends that lead. Your path to overcoming the data deluge is clear with today's leading capacity-per-watt SSD, the MP-D205V.



- PCIe 5.0 1x4 / 2x2 (Dual port)
- NVMe 2.0
- Capacity up to 122.88TB
- Form Factor: U.2, E3.S, E3.L
- DWPD: 0.3
- 128 Namespaces
- Power Loss Protection (PLP)
- ISE, TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-End Data Path Protection
- Metadata Protection
- SECDED
- Sanitize
- NVMe-MI (Management Interface)
- SMBus

KEY FEATURES	
Interface	PCIe 5.0 2x2 (Dual Port)
NAND Flash	3D TLC
DWPD	0
UBER	<1 sector per 10 bits
Operating Temperature	0°C - 70°C
Non-Operating Temperature	-40°C - 85°C
MTBF (million years)	2.5

### Sequential Performance

Read 14,700 MB/s

Read 3,000K MB/s

### Random Performance

Read 3,000K IOPS

Write 34K IOPS

# MP-D205V Specifications

U.2		
	Capacity	12288GB
Performance	Seq Read	14,700 MB/s
	Seq Write	3,200 MB/s
	Random Read	3,000K IOPS
	Random Write	35K IOPS
Power Consumption	Max	25 W
	Idle	5 W
Latency	Read Latency	110 us
	Write Latency	12 us

KEY FEATURES	
<b>Enterprise Features Support List:</b> <ul style="list-style-type: none"><li>• Namespace</li><li>• Dual port</li><li>• Reservation</li><li>• Metadata protection</li><li>• Powerloss protection</li><li>• Hardware AES-XTS 256-bit encryption</li><li>• Support SMBbus</li></ul>	<b>Compliance Support List</b> <ul style="list-style-type: none"><li>• PCIe 5.0</li><li>• NVMe 2.0</li><li>• Management Interface</li><li>• Rev 1.1 TCG Opal 2.0(6)</li><li>• Sanitize(6)</li></ul>

(1) 1 GB = 1,000,000,000 bytes.

(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.

(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.

(4) Power consumption is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).

(5) The results of DWPD are obtained in compliance with JESD219A Standards.



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# MP-D205V Specifications

E3.L		
	Capacity	12288GB
Performance	Seq Read	14,700 MB/s
	Seq Write	3,200 MB/s
	Random Read	3,000K IOPS
	Random Write	35K IOPS
Power Consumption	Max	25 W
	Idle	5 W
Latency	Read Latency	110 us
	Write Latency	12 us

KEY FEATURES	
<b>Enterprise Features Support List:</b> <ul style="list-style-type: none"><li>• Namespace</li><li>• Dual port</li><li>• Reservation</li><li>• Metadata protection</li><li>• Powerloss protection</li><li>• Hardware AES-XTS 256-bit encryption</li><li>• Support SMBbus</li></ul>	<b>Compliance Support List</b> <ul style="list-style-type: none"><li>• PCIe 5.0</li><li>• NVMe 2.0</li><li>• Management Interface</li><li>• Rev 1.1 TCG Opal 2.0(6)</li><li>• Sanitize(6)</li></ul>

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# MP-D205V Specifications

E3.S		
	Capacity	6144GB
Performance	Seq Read	14,700 MB/s
	Seq Write	3,200 MB/s
	Random Read	3,000K IOPS
	Random Write	35K IOPS
Power Consumption	Max	25 W
	Idle	5 W
Latency	Read Latency	110 us
	Write Latency	12 us

## KEY FEATURES

### Enterprise Features Support List:

- Namespace
- Dual port
- Reservation
- Metadata protection
- Powerloss protection
- Hardware AES-XTS 256-bit encryption
- Support SMBbus

### Compliance Support List

- PCIe 5.0
- NVMe 2.0
- Management Interface
- Rev 1.1 TCG Opal 2.0(6)
- Sanitize(6)

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