



# RealSSD™ P320h Enterprise PCIe Solid State Drives

## Product Summary

Our RealSSD™ P320h drive delivers outstanding performance in enterprise applications that demand frequent, intensive READ access, such as media streaming, Web acceleration, and data warehousing.

Built on server-grade Micron SLC NAND, the low-latency P320h drive provides market-leading READ throughput, combined with exceptional reliability and remarkable power efficiency. Our custom controller is designed specifically to interact with and optimize our high-performance NAND, achieving high sequential READ speeds. Engineered for endurance, the P320h drive can withstand high temps and a heavy workload.

The P320h SSD's performance extends beyond the hardware. Our unique RAIN (redundant array of independent NAND) technology provides both robust lifetime wear leveling and data protection, while a suite of other advanced NAND-management tools provide monitoring, reporting, error correction, and workload balancing.

In addition to product advantages, we also offer unique NAND supplier advantages. Because we're a NAND manufacturer with direct control over the memory design, process, and supply—you get the best that our product innovations, test and compatibility tools, and integrated support structure have to offer.

	P320h
Capacity <sup>1</sup>	350GB, 700GB
Interface	PCIe (Gen2-compliant) x8
Sequential READ	Up to 3.2 GB/s <sup>2</sup>
Sequential WRITE	Up to 1.9 GB/s <sup>2</sup>
Random READ	Up to 785,000 <sup>3</sup> IOPs
Random WRITE	Up to 205,000 <sup>3</sup> IOPs
READ Latency	<42µs (512 bytes) posted
WRITE Latency	<9µs posted
Active Power Consumption	25W max
MTBF (mean time between failures)	2 million device hours
Operating Temp	(0°C to +50°C)
Form Factor	HHHL*
Dimensions	68.90mm x 167.65mm x 18.71mm

<sup>1</sup> Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.

<sup>2</sup> 128KB transfer size, steady state.

<sup>3</sup> 4KB transfer size, steady state.

## P320h SSD Advantages for Enterprise Applications

### Breakthrough READ Performance

- Our custom controller and high-speed NAND deliver industry-leading sequential and random performance.

### Power Efficiency

- At just 25W, the P320h drive delivers up to an astounding 30,000 READ IOPs per watt.

### Durability

- Enterprise-grade SLC NAND and sophisticated NAND-management algorithms deliver up to 50 petabytes of drive life.

### Easy NAND Management Software

- Micron's RealSSD Manager provides a convenient GUI to optimize drive workload and lifespan.

### Reliability

- Leverages Micron's proven NAND quality and test capabilities to provide best-in-class drive reliability.

## Ideal for Use in Applications That Require:

- High READ performance
- High reliability
- Data integrity
- Durability

## Typical Applications:

- Web accelerators
- Media streaming
- Data warehousing
- Video-on-demand

Part	Density	Size*	Voltage	Sequential READ (MAX, 128KB)	Random READ (MAX, 4KB)
MTFDGAR350SAH	350GB	HHHL	12V	3.2 GB/s	785,000
MTFDGAR700SAH	700GB	HHHL	12V	3.2 GB/s	785,000

\* Half height, half length: 68.90mm x 167.65mm x 18.71mm

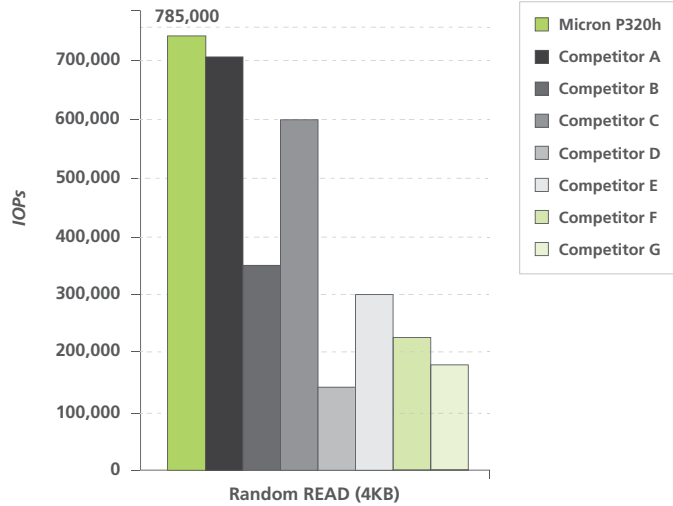
P320h Enterprise PCIe SSDs



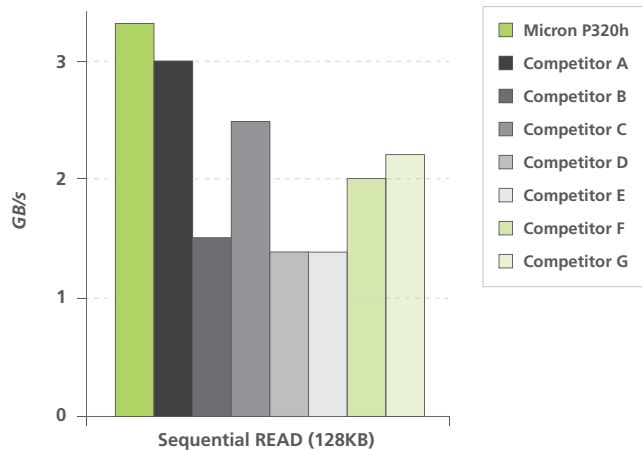
# Workhorse Performance

The unique design and features of the RealSSD™ P320h drive deliver solid performance. The charts below show how our drive compares to other SSD PCIe competitors.

**PCIe SSD Random READ Performance**



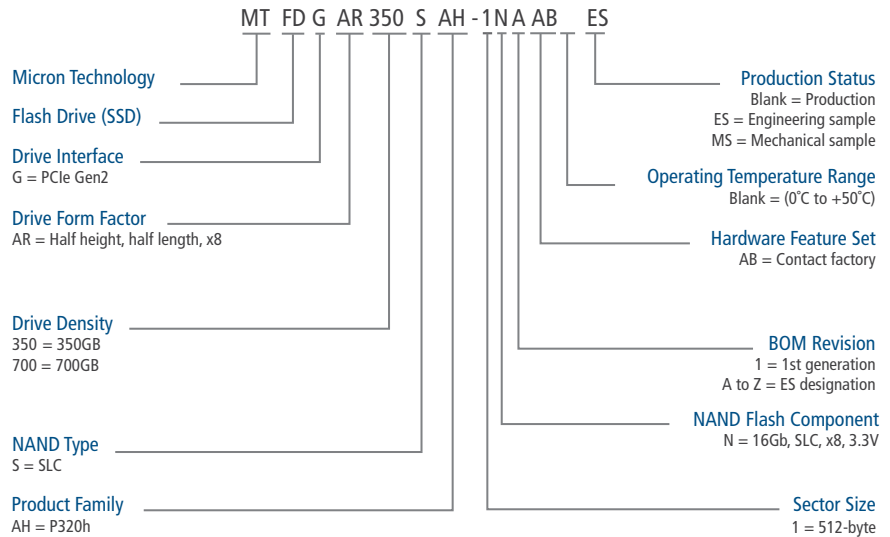
**PCIe SSD Sequential READ Performance**



P320h performance data collected in preconditioned state using Linux operating systems; competitor data based on publicly available specifications.

Micron Delivers...	You Benefit By...
NAND Flash leadership and experience	<i>Assurance that your data is being handled by a product built start-to-finish by NAND experts</i>
Worldwide technical support and factory engineering teams	<i>Employing a network of experienced talent dedicated to solving problems and delivering customer solutions</i>
A proven quality record	<i>Lowering product failure rates while increasing marketability and brand reputation</i>
Controlled SSD BOM with PCN notifications	<i>Easy supply chain management and planning</i>
Extensive testing	<i>Predictably reliable high-quality drives that work with your platform</i>

## SSD P320h Part Numbering



[micron.com/ssd](http://micron.com/ssd)

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