FlashArray//m
Bringing the Speed of Flash to Public Sector

Transform IT.

Who knew that all-flash storage could help reduce the cost of IT? FlashArray//m makes server and workload investments more productive, while lowering storage spend by up to 50%. Only Pure Storage helps you deliver improved online services while reducing operational costs and simplifying IT complexity.

Transform Your Organization.

Accelerate applications and unleash the power of real-time analytics. FlashArray//m keeps data secure with built-in Data at Rest encryption. Further, Rapid Data Locking (RDL) offers smart card based instant locking of the array, enabling you to protect against emergency datacenter breaches.

...All by Transforming Your Storage.

Mini Size
Reduce power, space and complexity by 90%

- 3U base chassis with 15-120+ TBs usable
- ~1kW of power
- 6 cables

Modular Scale
Scale FlashArray//m inside and outside of the chassis for generations

- Expandable to ~½ PB usable via expansion shelves
- Upgrade controllers and drives to expand performance and/or capacity

Mighty Performance
Transform your datacenter, cloud, or entire organization

- Up to 300,000 32K IOPS
- Up to 9 GB/s bandwidth
- <1ms average latency

Meaningful Simplicity
Appliance-like deployment with worry-free operations

- Plug-and-go deployment that takes minutes, not days
- Non-disruptive upgrades and hot-swap everything
- Less parts = more reliability

Accelerate Virtualization and VDI
- Virtualize Tier 1 IO-hungry databases and applications
- Reduce power consumption by 80%
- Squash boot storms while saving the ROI case for VDI
- Increase VM consolidation rates, reducing servers

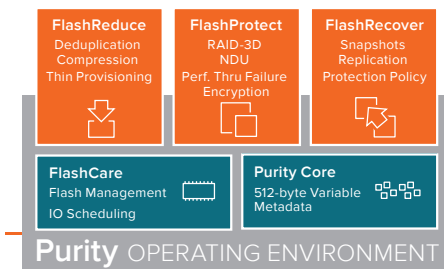**vmware READY** · **CITRIX** · **Windows Server 2008 Hyper-V**

Turbo-Charge Database Performance
- Speed transactions by 3-10x with consistent low-latency storage IO (OLTP)
- Enable online data analytics across wide datasets without sharding (OLAP)
- Mix production, analytics, test/development and backup workloads without fear

ORACLE · **Microsoft SQL Server**

Purity Operating Environment

Pure1

Storage Software Born for Flash

FlashReduce
Deduplication
Compression
Thin Provisioning

FlashProtect
RAID-3D
NDU
Perf. Thru Failure
Encryption

FlashRecover
Snapshots
Replication
Protection Policy

FlashCare
Flash Management
IO Scheduling

Purity Core
512-byte Variable
Metadata

Purity OPERATING ENVIRONMENT

Purity delivers industry-leading 5–10X data reduction, proven resiliency with non-disruptive operations with full performance and disaster recovery built-in. Data-at-Rest encryption and RDL allow you to keep the data secure.

Cloud-Based Management and Support

Storage ownership completely re-imagined for the cloud. Manage simply, monitor anywhere, and get the proactive help you need without having to ask.

PURESTORAGE

Evergreen Storage – A Better Model for Enterprise Storage

The move to FlashArray//m can be your last data migration! Deploy storage once – then expand capacity and performance incrementally as needed – without downtime or performance impact. Evergreen Storage is enabled by a combination of the FlashArray's stateless, modular architecture and the Forever Flash business model, enabling you to extend the lifecycle of storage from 3-5 years to a decade or more.

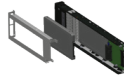**EVERGREEN STORAGE**

Modular Upgradability for Generations

//m Chassis	Flash Modules	NV-RAM Modules	Expansion Shelves	Controller Modules	I/O Modules
PCIe/NVMe and 12 Gb/s SAS fabrics Generations of Upgradability	20 in base chassis 512 GB, 1TB or 2TB	2 or 4 Mirrored NV-DDR3	Up to 4 shelves 12 or 24TB	2 HA Controllers m20, m50, or m70	6 slots, 12 ports 8/16 Gb/s FC or 10Gb Ethernet 4x 10Gb Ethernet onboard
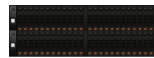
	//m20	**//m50**	**//m70**
Capacity	• Up to 120+ TBs effective capacity* • 5 – 40TBs raw capacity (base chassis)	• Up to 250+ TBs effective capacity* • 30 – 88TBs raw capacity (w/shelves)	• Up to 400+ TBs effective capacity* • 44 – 136TBs raw capacity (w/shelves)
Performance	• Up to 150,000 32K IOPS** • <1ms average latency • Up to 5 GB/s bandwidth	• Up to 220,000 32K IOPS** • <1ms average latency • Up to 7 GB/s bandwidth	• Up to 300,000 32K IOPS** • <1ms average latency • Up to 9 GB/s bandwidth
Connectivity	• 8 Gb/s Fibre Channel • 10 Gb/s Ethernet iSCSI • Management and Replication ports	• 16 Gb/s Fibre Channel • 10 Gb/s Ethernet iSCSI • Management and Replication ports	• 16 Gb/s Fibre Channel • 10 Gb/s Ethernet iSCSI • Management and Replication ports
Physical	• 3U • 742 Watts (nominal draw) • 110 lbs (49.9 kg) fully loaded • 5.12" x 18.94" x 29.72" FlashArray//m chassis	• 3U – 7U • 1007 - 1447 Watts (nominal draw) • 110 lbs (49.9 kg) fully loaded + 44 lbs per expansion shelf • 5.12" x 18.94" x 29.72" FlashArray//m chassis	• 5U – 11U • 1439 – 2099 Watts (nominal draw) • 110 lbs (49.9 kg) fully loaded + 44 lbs per expansion shelf • 5.12" x 18.94" x 29.72" FlashArray//m chassis

Note: All specifications are preliminarily, and subject to finalization before the FlashArray//m GA.

* Effective capacity assumes HA, RAID, and metadata overhead, GB-to-GiB conversion, and includes the benefit of data reduction with always-on inline deduplication, compression, and pattern removal. Average data reduction is calculated at 5-to-1, below the global average of the FlashArray user base.

** Why does Pure Storage quote 32K, not 4K IOPS? The industry commonly markets 4K IOPS, but real-world environments are dominated by IO sizes of 32K or larger. FlashArray//m adapts automatically to 512B-32KB IO for superior performance, scalability, and data reduction.

PURESTORAGE