

DATA SHEET

Pure Storage® FlashArray//C

Consolidate and simplify with capacity-optimized storage.



No compromises

Provide capacity-optimized apps with the power of all-flash NVMe. Deliver consistent, reliable experience across workloads.

Enterprise-grade storage

Provide QLC-optimized Evergreen storage with data reduction, built for 99.9999% availability, replication, and cloud portability.

Hyper consolidation

Hyper-consolidate large data stores with up to 5.2PB effective (1.39PB raw) storage in a tiny, three-, six-, or nine-rack unit

Better TCO

Pair hybrid storage economics with less management overhead, power, cooling, and data-center real estate.

Pure Storage® FlashArray™//C lets you consolidate workloads and simplify storage with consistent all-flash performance at a lower TCO over hybrid storage.

The management complexity, inconsistent performance, and lack of modern data services of hybrid flash and legacy disk systems often limit tier 2 enterprise applications. FlashArray//C provides a 100% NVMe all-flash foundation for tier 2 production applications, test and development workloads, [multi-site disaster recovery](#), and [data protection](#) at hybrid storage economics. Scale up to 5.2PB effective storage in just three to nine rack units. Maximize results and flexibility for tier 2 enterprise applications on-premises and easily connect to the cloud. Upgrade performance, capacity, and features over time without disruption with [Pure Evergreen™](#).

All-flash storage solutions introduced simplicity, efficiency and rich data services to enterprise applications. However, these indispensable benefits were made available only to mission-critical applications. With the introduction of FlashArray//C, Pure Storage is bridging the divide between performance-optimized and capacity-optimized applications. FlashArray//C is capacity-optimized and extends the modern data experience to tier 2 applications.

The top four use cases for Pure FlashArray//C are:

- Policy based VM-tiering
- Disaster Recovery for tier 2 apps
- Multi-cloud test/dev
- Snapshot consolidation



Policy Based VM-Tiering Between //X and //C

Provision high performance VMs to //X, lower performance VMs to //C with policy based automation.



Disaster Recovery for Tier 2 Apps

On-premises production applications on //X efficiently replicated to //C at DR site.



Multi-Cloud Test/Dev Workload Consolidation

Production applications on multiple //X arrays consolidated to //C for test/dev.



Snapshot Consolidation

Consolidate //X snapshots to //C for retention. Migrate data to public cloud using CloudSnap or Async Replication.

FIGURE 1: FlashArray//C use cases**

Hyper-consolidate Large Data Stores

Pure FlashArray//C densities scale from 1.3PB to 5.2PB in a tiny three- to nine-rack unit array and deliver consistent performance that comes with an [all-flash 100% NVMe storage solution](#). You can now consolidate test/dev, tier 2 virtual machines, data-retention/disaster recovery, and all other capacity-optimized applications on a single array. Let your IT organization drive simplicity into the infrastructure and eliminate complex siloed approaches to deploying these applications across multiple disparate hybrid disk-based solutions.

366TB Raw
1.3PB Effective



878TB Raw
3.2PB Effective



1.39PB Raw
5.2PB Effective



FIGURE 2: FlashArray//C60 capacity scaling

Simplicity by Design

FlashArray//C has the power to simplify everything. The hardware, software, and cloud management experience are co-designed to make everything work. Examples of this simplicity include:

- One box, 30-minute installation with no manual required (with available Pure Professional Services or partner installation)
- Only six cables
- All array software included
- Data-reduced end-to-end encryption
- No performance tuning
- APIs for automation
- AI-driven cloud management
- Proactive support

Cloud-based Management

The [Pure1® platform](#) provides simple cloud-based management and effortless predictive support with full-stack analytics and the AI-driven power of [Pure1 Meta™](#). Pure1 provides a snapshot catalog of all your backups in one place, whether the target is another FlashArray, FlashBlade™, another NFS target, or public cloud like Amazon S3.

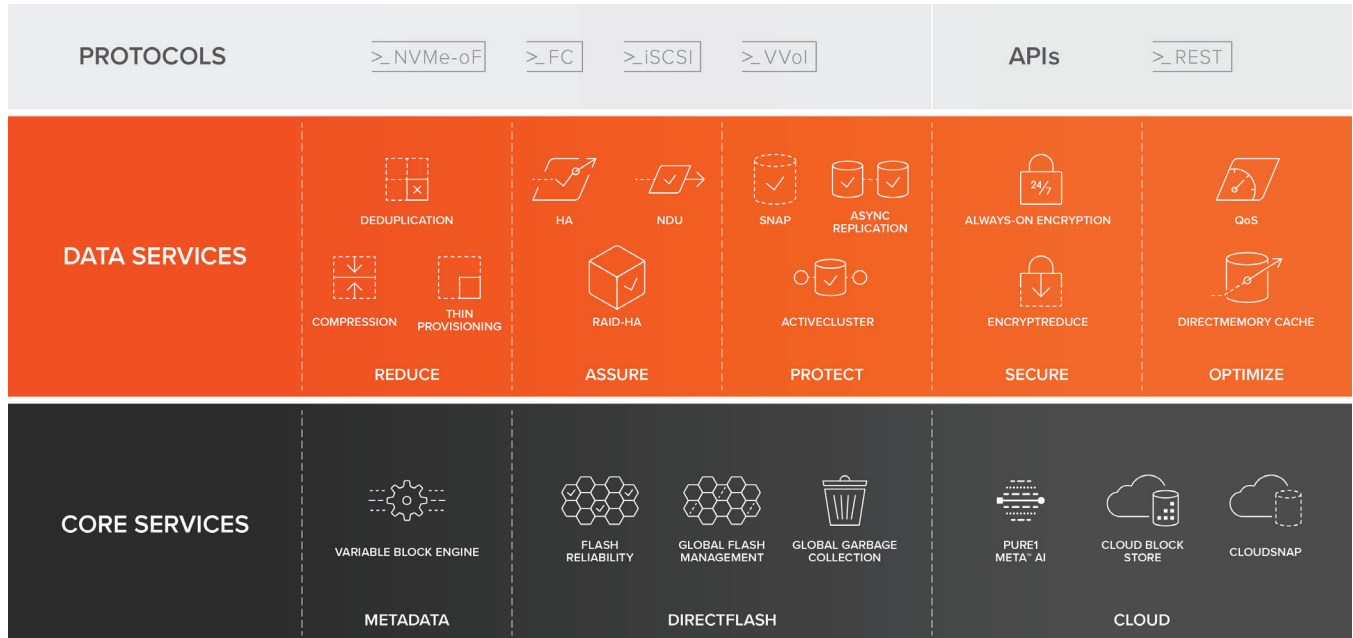


FIGURE 3: Purity//FlashArray Features*

Purity: The Software-defined Heart of FlashArray

Purity for FlashArray delivers rich, enterprise [data services](#), DirectFlash™ global flash management, and Evergreen™ improvements with every release. ActiveCluster™ for [business continuity and disaster recovery](#), QoS, VVols, NVMe-oF, Snap to NFS, Purity CloudSnap™, and EncryptReduce are all examples of new features provided with non-disruptive Purity upgrades. All Purity storage services, APIs, and advanced data services are built-in and included with every array**.

DirectFlash™

FlashArray moves beyond the legacy SSD architectures that are designed to make flash pretend to be a hard disk. Instead, [DirectFlash](#) speaks directly to raw NAND with a super-efficient [NVMe protocol and leverages NVMe-oF](#). DirectFlash includes multiple components:

DirectFlash Software: DFS manages array I/O globally, for a faster, more efficient architecture. DFS provides detailed I/O scheduling and performance management, making I/Os deterministic and reducing average latency by reducing the number of slow I/Os that would often occur in SSD architectures.

DirectFlash Module: DFM is a Pure-designed flash module that connects raw flash directly to the FlashArray storage via NVMe. Unlike traditional SSDs that use a flash controller or flash translation layer, DFM is just raw flash. This design removes performance roadblocks of SSDs used by many legacy storage architectures.

DirectFlash Shelf: Used to add additional NVMe capacity to a FlashArray//C, DirectFlash Shelf is external to the array chassis. Instead, it's connected to the chassis via NVMe-oF protocol, RDMA over converged (RoCE), leveraging 50Gb-per-second Ethernet. The shelf maintains the ability to support different sizes of DFMs as flash density improves and new forms become available, such as SCM, QLC, and others.

DirectFlash Fabric: DirectFlash Fabric lowers network latency dramatically with the added benefits of enabling enterprise-class reliability and data services via shared storage versus DAS. NVMe-oF enables massive optimization between the storage controllers and host over fast networking, which enables DirectFlash Fabric to deliver greater performance and efficiency gains, including host CPU offload benefits.

Evergreen Storage

FlashArray operates like SaaS and the cloud. Deploy it once and enjoy a subscription to continuous innovation as you expand and improve performance, capacity, density, and/or features for 10 years or more – all without downtime, performance impact, or data migrations. Pure has engineered compatibility for future technologies directly into the product via the modular, stateless architecture of FlashArray. This means you can non-disruptively upgrade and expand the equipment you already own. Evergreen programs like Free Every Three and Upgrade Flex provide full trade-in value when upgrading controllers, giving organizations the agility they need to grow and modernize as needed.

The Capacity Consolidation program keeps your storage modern and dense as you expand. With [Evergreen Storage](#), you don't have to re-buy TBs you already own. Keep your storage evergreen, modern and dense. And always meet your business needs. Pure uniquely offers all of our core solutions either as products (CAPEX) or as services (OPEX) via our Pure as-a-Service portfolio.

Technical Specifications

	Capacity	Physical
//C60-366	Up to 1.3PB / 1.2PiB effective capacity*** 366TB / 320.1TiB raw capacity***	3U; 1000–1240 watts (nominal–peak) 97 lbs (44 kg) fully loaded 5.12" x 18.94" x 29.72" chassis
//C60-878	Up to 3.2PB / 2.9PiB effective capacity*** 878TB / 768.2TiB raw capacity***	6U; 1480–1760 watts (nominal–peak) 184.7 lbs (83.8 kg) fully loaded 10.2" x 18.94 x 29.72" chassis
//C60-1390	Up to 5.2PB / 4.7PiB effective capacity*** 1.39PB / 1.19PiB raw capacity***	9U; 1960–2280 watts (nominal–peak) 176.6 lbs (123.6kg) fully loaded 15.35" x 18.94 x 29.72" chassis

Additional Resources

- [FlashArray//X Data sheet](#)
- [Pure1 Data sheet](#)
- [Purity Data sheet](#)
- [ActiveCluster Data sheet](#)

* Not all Purity features supported on all FlashArray models.

** Not all features available at General Availability.

*** 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 and does not include thin provisioning.

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