



## Datasheet

# NetApp AFF C190

Modernize your IT with affordable all-flash storage

### Key Benefits

#### Simple

- Provision storage in minutes.
- Manage file and block data on a single system.
- Effortlessly connect to any public cloud.

#### Smart

- Lower TCO with data reduction.
- Accelerate application performance and improve response time.
- Optimize availability and performance.

#### Secure

- Safeguard your data.
- Protect your data at rest and in transit.
- Never lose data with zero-data-loss protection.

Organizations large and small are navigating at a rapid pace of change in a data-driven economy. Delivering data simply, quickly, and cost-effectively is essential to driving business growth, and hybrid cloud has emerged as the most efficient way to meet changing business needs. Every IT organization is trying to determine how to modernize with hybrid cloud, and all-flash storage systems are critical on-premises to speed up enterprise applications. However, small enterprises have continued to use hard disk storage systems because of the high cost of all-flash solutions.

All-flash storage systems are no longer out of reach. The NetApp® AFF C190 storage system powered by NetApp ONTAP® data management software, offers a simple, smart, and secure enterprise-class flash system for an affordable price. Designed for IT generalists, it helps you meet new business requirements with a modern all-flash array that provides comprehensive data services, integrated data protection, seamless scalability, new levels of performance, and cloud integration.

### Easy Management for IT Generalists

#### Deploy workloads in under 10 minutes

Fast-provisioning workflows enable you to provision new storage systems in minutes from power-on to serving data. A simple wizard guides you in quickly setting up and configuring the system. Built-in workflows for Oracle, Microsoft SQL, MySQL, MongoDB, VMware, and other applications let you easily provision storage for your applications as needed.

#### Use a single system for file and block data

Simplify your infrastructure by consolidating your file and block data onto a single storage system. With one interface to manage all your data, you will improve the productivity of your IT team.

#### Effortlessly connect to public clouds

Automatically tier cold data or back up to the cloud to reduce overall storage costs. The AFF C190 system delivers industry-leading hybrid cloud integration, supporting all major public clouds including Google Cloud, Amazon Web Services (AWS), Microsoft Azure, IBM Cloud, and Alibaba Cloud.

#### Drive Operational Efficiencies

##### Improve storage efficiency to control costs

Reduce infrastructure costs with the comprehensive storage efficiency capabilities delivered by the AFF C190 system. Data reduction features in ONTAP, including

compression and deduplication, work together to help you optimize the capacity needed. Your storage efficiency is backed by the industry-leading efficiency guarantee program.

### Accelerate application performance with flash

The AFF C190 system is optimized for flash and delivers 10 times faster application response than hybrid arrays. All-flash storage allows you to run more workloads on a single system without compromising performance.

### Optimize availability and performance with data-driven analytics

Keep your storage system performing optimally, providing uninterrupted access to data, and maintaining the performance your business-critical applications need. The NetApp Active IQ® intelligence platform provides data-driven insights that help you identify and correct problems before they occur.

### Protect Your Data

#### Maintain resiliency

Your end users demand nonstop access to business-critical data, so you can't allow unplanned downtime and other disruptions to affect business operations. The AFF C190 system provides comprehensive integrated data protection to safeguard your data and keep things running smoothly. Meet your requirements for local backup with near-instant recovery by using space-efficient NetApp Snapshot™ copies. Achieve remote backup/recovery and disaster recovery with NetApp SnapMirror® asynchronous replication.

### Secure your application data

Robust security is important to protect data from internal and external threats. Without any special hardware, you can easily secure your at-rest data with NetApp Volume Encryption. In addition, multifactor authentication improves data access control, and cryptographic shredding enables General Data Protection Regulation (GDPR) compliance for your organization.

### Never lose your data

Achieve zero-data-loss protection (RPO=0) if a disaster or major outage occurs. NetApp SnapMirror Synchronous technology delivers granular, synchronous data replication and maintains storage efficiency savings during and after data transfer.

### About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit [www.netapp.com](http://www.netapp.com). #DataDriven

## AFF C190 Technical Specifications for Active-Active Dual Controller

Drives and Capacity	Connectivity	Protocols and Operating Systems
Max. effective capacity 50TiB <sup>a</sup>	4 ports—12Gb/6Gb SAS	ONTAP 9.6 GA or later
Max. SSD 24 drives	1GbE management port, USB port	Protocols: FC, FCoE, iSCSI, NFS, pNFS, SMB
Drive type: 960GB SSD	8 ports—FC target (16Gb) 8 ports—FCoE target, UTA2 12 ports—10GbE ports, UTA2 12 ports—10GBASE-T	Host OS version: Windows 2000, Windows Server 2003, Windows Server 2008, Windows Server 2012, Windows Server 2016, Linux, Oracle Solaris, AIX, HPE UX, macOS, VMware, ESX

a. Effective capacity is based on 3:1 storage efficiency ratios with the maximum number of SSDs installed. The actual ratio can be higher depending on workloads and use cases

### Software Included with AFF C190

ONTAP features and software included with AFF C190

- Efficiency: NetApp FlexVol® technology, inline deduplication, inline compression, inline compaction, and thin provisioning
- Availability: high availability (HA) pair and multipath I/O
- Data protection: NetApp RAID DP®, RAID-TEC™, and Snapshot technology
- SnapMirror Synchronous replication
- Performance acceleration: NetApp FlexCache® software
- Management: NetApp OnCommand® Workflow Automation, ONTAP System Manager, and Active IQ Unified Manager
- Scalable NAS container: NetApp ONTAP FlexGroup
- Storage protocols supported: FC, FCoE, iSCSI, NFS, pNFS, and SMB
- NetApp SnapRestore® software: restore entire Snapshot copies in seconds
- NetApp SnapMirror software: simple, flexible backup and replication for disaster recovery
- NetApp FlexClone® technology: instant virtual copies of files, LUNs, and volumes
- NetApp SnapCenter® software: unified, scalable and plug-in suite for application-consistent data protection and clone management
- NetApp SnapManager® software: application-consistent backup and recovery for enterprise applications

### Optional Software

Extended-value software

- OnCommand Insight: flexible, efficient resource management for heterogeneous environments
- NetApp SnapLock® software: compliance software for write once, read many (WORM) protected data
- NetApp Volume Encryption (free license): granular, volume-level, data-at-rest encryption
- FabricPool: automatic data tiering to the cloud (free when tiering to NetApp StorageGRID®)
- NetApp Data Availability Services: cloud-native backup solution for ONTAP storage