# 2U

Accelerate workloads with affordable, flexible, scalable systems.

# Up to 3.2PB

In just 2U, create all-flash or hybrid configurations with compression and deduplication data reduction options.

## 99.9999% availability

Support missioncritical applications with the highest levels of availability.

#### Built with IBM Spectrum<sup>®</sup> Virtualize software

Provides advanced data services for IBM FlashSystem 5000.

## Supported by IBM FlashWatch

Programs and guarantees that give you the confidence to purchase, own and upgrade your FlashSystem.

# IBM FlashSystem 5000 product highlights

# Affordability without compromise.

The <u>IBM FlashSystem</u><sup>•</sup> 5000 models (5015 and 5035) offer the affordability, performance and management simplicity your organization needs in a cost-effective, 2U, flash or hybrid flash storage solution.

Hybrid cloud storage capabilities

Scalable support for private, public and hybrid cloud deployments.

- Affordability without compromise
   Economic all-flash or hybrid storage solutions to fit your capacity and budget.
- High performance and resilience
   Powerful entry-level storage with enterprise-grade capabilities to maximize data protection and high availability.



# Optimize hybrid cloud and increase business agility

Leveraging hybrid cloud capabilities to enhance your current environment will save you time and money while future-proofing your data infrastructure. Built with IBM Spectrum Virtualize software, IBM FlashSystem 5000 models extend capabilities and data services to existing systems. They also enable data access, delivery and placement across public cloud, private-cloud and on-premises environments. Grow your hybrid cloud with the flexibility to start small and scale up as business demands evolve.

With <u>IBM Spectrum Virtualize for Public Cloud</u>, a complementary offering to FlashSystem, you get real-time data replication and disaster recovery. You also get data migration between your existing on-premises infrastructure and leading cloud providers to further increase business agility, resilience and data security.



# Increase efficiency, lower costs

IBM FlashSystem 5000 offers enterprise-class capabilities and performance for entry workloads. Get storage capacity and speed to meet current needs along with the ability to scale as these needs grow. With better performance and a tiered storage environment, you can use less space, which reduces maintenance expenses and other operating costs. FlashSystem 5015 and 5035 include AI-driven IBM Easy Tier<sup>\*</sup>, which automatically migrates frequently accessed data elements to your high-performing flash storage. This ensures that your data is on the right storage tier, balancing cost and performance. FlashSystem 5035 also includes innovative data reduction options with compression, deduplication and automated thin provisioning. These capabilities significantly improve usable capacity and efficiency, allowing you to store more in less space.

#### Data-reduction guarantee

2:1 self-certified or up to 5:1 with workload profiling<sup>1</sup>.

No-cost migration

90-day, no-cost data migration from over 500 storage controllers, both IBM and non-IBM.

Consistent management

Optimize resources with a single platform that simplifies management and grows with you.

## Improve performance and data resilience

IBM FlashSystem 5000 models include <u>IBM Storage Insights</u>, cloud-supported storage management software with predictive AI-based analytics. This software monitors changes in your storage capacity and performance levels in real time, identifying and quickly resolving issues with automated support features.

- Speed business decisions with enterprise-grade performance for entry-level price
   Less than 70 microsecond latency.
   FlashSystem 5015 can reach up to 400K IOPs.
   FlashSystem 5035 can reach up to 1.2M IOPs.
- Improve the health and performance of your infrastructure with Storage Insights
   66% of system issues resolved automatically.
   40% faster action plan after a case is opened.

FlashSystem 5000 models are fully redundant, dual-site, active-active, high-availability solutions to ensure business continuity. FlashSystem 5015 capabilities include 99.9999% availability and FlashCopy<sup>\*2</sup>. FlashSystem 5035 extends data resilience and business continuity with security features that include non-disruptive data migration and remote mirroring using IBM HyperSwap<sup>\*</sup> technology, and hardware-accelerated data-at-rest encryption.



# Dive deeper into IBM FlashSystem 5000

IBM FlashSystem 5000 is a future-ready flash storage solution for the entry space that can scale up as business needs evolve — all within the FlashSystem family's streamlined, one-platform model.

View the IBM FlashSystem 5000 data sheet > Compare IBM FlashSystem configurations >

# Technical specifications



Specifications	IBM FlashSystem 5035	IBM FlashSystem 5015
Software	IBM Spectrum Virtualize IBM Storage Insights	IBM Spectrum Virtualize IBM Storage Insights
Single or dual controller	Dual (Active/Active)	Dual (Active/Active)
Connectivity (standard)	10 Gb iSCSI (On the motherboard)	1 Gb iSCSI (On the motherboard)
Connectivity (optional)	<ul> <li>16 Gb/s Fibre Channel</li> <li>12 Gb/s SAS</li> <li>25 Gb/s iSCSI (iWARP or RoCE)</li> <li>10 Gb/s iSCSI</li> </ul>	<ul> <li>16 Gb/s Fibre Channel</li> <li>12 Gb/s SAS</li> <li>25 Gb/s iSCSI (iWARP or RoCE)</li> <li>10 Gb/s iSCSI</li> </ul>
Cache per control enclosure / clustered system	32GB or 64GB / 64GB or 128GB	32GB or 64GB
Max bandwidth	12GB/s	8GB/s
Drives supported	<ul> <li>Small form-factor 2.5-inch disk drives:</li> <li>900 GB, 1.2 TB, 1.8 TB and 2.4 TB @ 10k rpm</li> <li>2 TB @ 7.2k rpm SAS nearline</li> <li>Large form-factor 3.5-inch disk drives:</li> <li>900 GB, 1.2 TB, 1.8 TB and 2.4 TB @ 10k rpm, SAS (2.5-inch drive in a 3.5-inch drive carrier)</li> <li>4 TB, 6 TB, 8 TB, 10 TB, 12 TB, 14 TB, 16 TB, 18TB @ 7.2k rpm</li> <li>2.5-inch flash drives:</li> <li>800 GB, 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB and 30.72 TB</li> </ul>	<ul> <li>Small form-factor 2.5-inch disk drives:</li> <li>900 GB, 1.2 TB, 1.8 TB and 2.4 TB @ 10k rpm</li> <li>2 TB @ 7.2k rpm SAS nearline</li> <li>Large form-factor 3.5-inch disk drives:</li> <li>900 GB, 1.2 TB, 1.8 TB and 2.4 TB @ 10k rpm, SAS (2.5-inch drive in a 3.5-inch drive carrier)</li> <li>4 TB, 6 TB, 8 TB, 10 TB, 12 TB, 14 TB, 16 TB, 18 TB @ 7.2k rpm</li> <li>2.5-inch flash drives:</li> <li>800 GB, 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB and 30.72 TB</li> </ul>
Maximum drives supported	<ul> <li>Maximum of 504 drives per system and 1,008 drives in two-way clusters:</li> <li>Small form-factor enclosure: 24 x 2.5-inch drives</li> <li>Large form-factor enclosure: 12 x 3.5-inch drives</li> <li>High-density expansion enclosure: 92 x 3.5-inch drives</li> </ul>	<ul> <li>Maximum of 392 drives per system:</li> <li>Small form-factor enclosure: 24 x 2.5-inch drives</li> <li>Large form-factor enclosure: 12 x 3.5-inch drives</li> <li>High-density expansion enclosure: 92 x 3.5-inch drives</li> </ul>
Maximum expansion enclosure capacity	<ul> <li>Up to 20 standard expansion enclosures per controller</li> <li>Up to 8 high-density expansion enclosures per controller</li> </ul>	<ul> <li>Up to 10 standard expansion enclosures per controller</li> <li>Up to 4 high-density expansion enclosures per controller</li> </ul>
RAID levels	Distributed RAID 1, 5 and 6	Distributed RAID 1, 5 and 6
Fans and power supplies	Fully redundant, hot-swappable	Fully redundant, hot-swappable



To learn more about how IBM can help you develop new business solutions based on AI and deep learning, contact your IBM Business Partner or visit our website: ibm.com.

© Copyright IBM Corporation 2021

IBM Corporation New Orchard Road Armonk, NY 10504

Produced in the United States of America September 2021

IBM, the IBM logo, ibm.com, IBM FlashSystem, IBM Spectrum Virtualize, and FlashCopy are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at <u>ibm.com/legal/</u> copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.