



EonStor DS Family

Enterprise-Class High Availability SAN Storage

Highlights

Performance

- Up to 750K end-to-end IOPS to accelerate all storage operation
- Massive sequential throughput of up to 11 GB/s read and 5.5 GB/s write
- EonStor DS 3024B delivering an impressive and reliable performance score of 218K IOPS at an excellent IOPS per dollar ratio (US\$0.24/IOPS)
- EonStor DS 4024B ranked no.1 in SPC-2 price/performance ratio (US\$6.80 dollars per MB/s) in 2017

Efficiency

- SSD cache to accelerate read performance for hot data
- Offline deduplication and compression to reduce the total storage capacity required
- A super capacitor with a flash drive to ensure data integrity during power outage

Flexible Scalability

- Holding up to 448 drives with expansion enclosures
- Expansion enclosures in diverse form factors

User-Friendly Management

- Exclusive SANWatch interface for easy management via a web browser

Introduction

EonStor DS is a high-availability SAN storage solution designed for enterprises. Its hardware design features multiple form factors, symmetric active-active controllers, flexible host boards to choose from, modular components, and high scalability. The management software comes with complete data services and an easy-to-use management interface. EonStor DS is ideal for all SAN environments and enterprise applications (e.g. database, virtualization, video editing, backup, and surveillance) to meet your performance or budget needs.

Smart Data Protection Against Power Failures

EonStor DS has a built-in smart data-saving mechanism that reacts immediately to power failures. When a power failure strikes, EonStor DS continues being powered on by the super capacitor, a long-enduring electricity container that requires no maintenance, and immediately writes unsaved data to a flash drive module to avoid potential data loss. Once the power supply is back, the system starts retrieving and integrating data from the flash drive, ensuring maximum data integrity and availability.

Easy Maintenance

Clear and easy-to-act-upon system status messages make troubleshooting simple even without elaborate IT support. Additionally, integrated smart media scan prevents data errors and corruption. It works in the background at all times without affecting system performance, keeping a close tab on your data to ensure its integrity.

Intuitive Management with Proprietary Tools

SANWatch is the proprietary web-based management interface that gives you full control over EonStor DS and its storage environment. You can directly access the system configurations and information just with a web browser. RAIDWatch is another proprietary utility application that allows you to enhance the RAID performance of EonStor DS.

Furthermore, with a complete set of command lines, you can reach the system's lower layer and fine-tune its configurations and behavior for optimal efficiency.

PHYSICAL SPECIFICATIONS

| Product Series | | DS 1000 Gen2 | DS 2000 Gen2 | DS 1000 G3 | DS 2000 G3 |
|---|--|--|---------------------------------|---|-------------------------|
| Form Factor | 2U 12-bay | DS 1012 G2 | DS 2012 G2 | DS 1012 G3/R3C | DS 2012 G3/R3C |
| | 2U 24-bay | - | - | DS 1024 G3B/R3CB | DS 2024 G3B/R3CB |
| | 3U 16-bay | DS 1016 G2/G2NH | DS 2016 G2 | DS 1016 G3/R3C | DS 2016 G3/R3C |
| | 4U 24-bay | - | - | DS 1024 G3/R3C | DS 2024 G3/R3C |
| Note: G: Single controller, not upgradable R: Dual redundant controllers 3: G3 2: Gen2 C: Super capacitor B: 2.5" drive NH: No host board U: Ultra performance | | | | | |
| Controller | | Single | | Single or dual redundant | |
| Cache Backup Technology | | Super capacitor + flash module (optional) | | Super capacitor + flash module (optional for single-controller models) | |
| Cache Memory | Single Controller | Default DDR3 4GB, up to 16GB | | Default DDR4 4GB, up to 64GB | |
| | Redundant Controllers | - | | Default DDR4 8GB, up to 128GB | |
| Supported Drives | | <ul style="list-style-type: none"> • 2.5" SAS SSD • 2.5" 12Gb/s SAS 10,000 or 15,000 RPM HDD • 3.5" 12Gb/s NL-SAS 7,200 RPM HDD • 2.5" SATA SSD, 3.5" 6Gb/s SATA 7,200 RPM HDD (for single-controller models only) | | | |
| | | Note: For the latest Compatibility Guide, refer to our official website. | | | |
| Max. Drive Number | | 448 | | | |
| Max. SSD Cache Pool (Block Level) | | 2TB | | | |
| Onboard 1GbE Ports (RJ45) | | 4 | 4 | 0 | 0 |
| Onboard SAS Expansion Ports | | 1 | 1 | 2 | 2 |
| Max. Host Board Slots | | 1 | 1 | 2 | 2 |
| Host Board Options | | <ul style="list-style-type: none"> • 16Gb/s FC x 4 • 32Gb/s FC x 2 • 1GbE (RJ-45) x 4 • 10GbE (SFP+) x 2 • 12Gb/s SAS x 2 | | <ul style="list-style-type: none"> • 16Gb/s FC x 4 • 32Gb/s FC x 2 • 32Gb/s FC x 4 • 1GbE (RJ-45) x 4 • 10GbE (SFP+) x 2 • 25GbE (SFP28) x2 • 12Gb/s SAS x 2 | |
| | | Note: It is strongly recommended that you refer to the latest Host Board and Memory Guide on our website for complete information, including supported combinations and important notes, before purchasing any host board for your model. | | | |
| Max. 16Gb/s FC Ports | | 4 | 4 | 8 | 8 |
| Max. 32Gb/s FC Ports | | 2 | 2 | 8 | 8 |
| Max. 1GbE Ports (RJ45) | | 8 | 8 | 8 | 8 |
| Max. 10GbE Ports (SFP+) | | 2 | 2 | 4 | 4 |
| Max. 25GbE Ports (SFP28) | | 0 | 0 | 4 | 4 |
| Max. 12Gb/s SAS Ports | | 3 | 3 | 6 | 6 |
| Expansion Enclosures (JBODs) | | JB 3012, JB 3016, JB 3024 B , JB 3060 L | | | |
| Dimensions (Without Chassis Ears and Protrusions) (W x H x D) | | <ul style="list-style-type: none"> • 2U 12-bay / 2U 24-bay: 449 x 88 x 500 mm • 3U 16-bay: 449 x 130 x 500 mm • 4U 24-bay: 449 x 174.4 x 500 mm | | | |
| Package Dimensions (W x H x D) | | <ul style="list-style-type: none"> • 2U 12 / 2U 24-bay: 588 x 239 x 780 mm • 3U 16-bay: 588 x 283 x 780 mm • 4U 24-bay: 588 x 325 x 780 mm | | | |
| Power Supply Unit | Power Supplies (Redundant and Hot-swappable) | Global | 460W x 2 (80 PLUS Bronze) | | |
| | | EU | 800W x 2 (80 PLUS Titanium) | | |
| | AC Voltage | Global | 100-240VAC @10-5A | | |
| | | EU | 100-127VAC @10A, 200-240VAC @5A | | |
| Frequency | | 50-60 Hz | | | |
| Safety Standards | | • Electromagnetic compatibility: CE, BSMI, FCC | | • Safety: UL, BSMI, CB | |

PHYSICAL SPECIFICATIONS

| Product Series | | DS 3000E | DS 3000 | DS 4000 Gen2 | DS 4000 |
|--|--|--|---|------------------|---|
| Form Factor | 2U 12-bay | DS 3012GEN/REC | DS 3012GU/RUC | - | - |
| | 2U 24-bay | DS 3024GENB/RECB | DS 3024SUCB/RUCB | DS 4024S2CB/R2CB | DS 4024SUCB/RUCB |
| | 3U 16-bay | DS 3016GEN/REC | DS 3016GU/RUC | DS 4016G2/R2C | DS 4016SUC/RUC |
| | 4U 24-bay | DS 3024GEN/REC | DS 3024SUC/RUC | DS 4024S2C/R2C | - |
| Note: G: Single controller, not upgradable R: Dual redundant controllers S: Single upgradable to dual redundant controllers E: Essential 2: Gen2 C: Super capacitor N: No super capacitor B: 2.5" drive U: Ultra performance | | | | | |
| Controller | | Single or dual redundant | Single, dual-redundant, or single upgradable to redundant | | Dual redundant or single upgradable to dual redundant |
| Cache Backup Technology | | Super capacitor + flash module | | | |
| Cache Memory | Single Controller | Default DDR4 4GB, up to 64GB | | | Default DDR4 4GB, up to 128GB |
| | Redundant Controllers | Default DDR4 8GB, up to 128GB | | | Default DDR4 8GB, up to 256GB |
| Supported Drives | | <ul style="list-style-type: none"> • 2.5" SAS SSD • 2.5" 12Gb/s SAS 10,000 or 15,000 RPM HDD • 3.5" 12Gb/s NL-SAS 7,200 RPM HDD • 2.5" SATA SSD, 3.5" 6Gb/s SATA 7,200 RPM HDD (for single-controller models only) | | | |
| Note: For the latest Compatibility Guide, refer to our official website. | | | | | |
| Max. Drive Number | | 448 | | | |
| Max. SSD Cache Pool (Block Level) | | 2TB | 4TB | 4TB | 4TB |
| Onboard 1GbE Ports (RJ45) | | 0 | 8 | 8 | 4 |
| Onboard SAS Expansion Ports | | 2 | 2 | 2 | 4 |
| Max. Host Board Slots | | 2 | 4 | 4 | 4 |
| Host Board Options | | <ul style="list-style-type: none"> • 16Gb/s FC x 4 • 32Gb/s FC x 2 • 32Gb/s FC x 4 • 1GbE (RJ-45) x 4 • 10GbE (SFP+) x 2 • 25GbE (SFP28) x 2 • 12Gb/s SAS x 2 | | | |
| Note: It is strongly recommended that you refer to the latest Host Board and Memory Guide on our website for complete information, including supported combinations and important notes, before purchasing any host board for your model. | | | | | |
| Max. 16Gb/s FC Ports | | 8 | 16 | 16 | 16 |
| Max. 32Gb/s FC Ports | | 8 | 16 | 16 | 16 |
| Max. 1GbE Ports (RJ45) | | 8 | 24 | 24 | 20 |
| Max. 10GbE Ports (SFP+) | | 4 | 8 | 8 | 8 |
| Max. 25GbE Ports (SFP28) | | 4 | 8 | 8 | 8 |
| Max. 12Gb/s SAS Ports | | 6 | 10 | 10 | 12 |
| Expansion Enclosures (JBODs) | | JB 3012, JB 3016, JB 3024B, JB 3060L, JB 3090 | | | |
| Dimensions (Without Chassis Ears and Protrusions) (W x H x D) | | <ul style="list-style-type: none"> • 2U 12-bay / 2U 24-bay: 449 x 88 x 500 mm • 3U 16-bay: 449 x 130 x 500 mm • 4U 24-bay: 449 x 174.4 x 500 mm | | | |
| Package Dimensions (W x H x D) | | <ul style="list-style-type: none"> • 2U 12 / 2U 24-bay: 588 x 239 x 780 mm • 3U 16-bay: 588 x 283 x 780 mm • 4U 24-bay: 588 x 325 x 780 mm | | | |
| Power Supply Unit | Power Supplies (Redundant and Hot-swappable) | Global | 460W x 2 (80 PLUS Bronze) | | 530W x 2 (80 PLUS Bronze) |
| | | EU | 800W x 2 (80 PLUS Titanium) | | |
| | AC Voltage | Global | 100-240VAC @10-5A | | |
| | | EU | 100-127VAC @10A, 200-240VAC @5A | | |
| Frequency | | 50-60 Hz | | | |
| Safety Standards | | <ul style="list-style-type: none"> • Electromagnetic compatibility: CE, BSMI, FCC • Safety: UL, BSMI, CB | | | |

SOFTWARE SPECIFICATIONS

| | |
|------------------------------|--|
| Max. Logical Drive Number | 30 |
| Max. Logical Drive Capacity | 512TB |
| Stripe Size | 16KB, 32KB, 64KB, 128KB, 256KB, 512KB, 1024KB (per logical drive) |
| Write Policy | Write-back or write-through (per logical drive) |
| Max. Logical Volume Size | 512TB |
| Max. Logical Volume Number | 30 |
| Max. Partition Size | 512TB |
| Max. Partition Number | 1024 (per logical volume) / 2048 (per system) |
| Max. Host-LUN Mapping Number | 4096 |
| Max. Reserved Tag Number | 256 (per Host-LUN connection) |
| Max. iSCSI Sessions | 416 (per controller) |
| RAID Options | RAID 0, RAID 1, RAID 3, RAID 5/5F, RAID 6/6F, RAID 10, RAID 30, RAID 50, RAID 60 |
| Supported Protocols | FC, iSCSI, SAS |
| Management | <ul style="list-style-type: none"> Web-based SANWatch management software Embedded RAIDWatch Terminal via RS-232C Telnet/SSH Command-line interface (CLI) LCD keypad panel (DS 3000) |
| Availability and Reliability | <ul style="list-style-type: none"> Hot-swappable hardware modules Trunk group Device mapper Cache safe technology |
| Efficiency | <ul style="list-style-type: none"> Offline compression Offline deduplication |
| Notification | <ul style="list-style-type: none"> Email SNMP traps |
| Supported OS | Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise, Sun Solaris, macOS X, VMware, Citrix XenServer, OpenStack Cinder Note: For supported OS versions, please refer to the Compatibility Guide. |

DATA SERVICES

| | | | |
|---------------------------|--------------------|--|---|
| Thin Provisioning | Default | "Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space. | |
| Local Replication | Snapshot | Default | Snapshot images per source partition: 64 Snapshot images per system: 128 |
| | | Optional | Snapshot images per source partition: 256 Snapshot images per system: 4096 |
| | Volume Copy/Mirror | Default | Replication pairs per source volume: 4 Replication pairs per system: 16 |
| | | Optional | Replication pairs per source volume: 8 Replication pairs per system: 256 |
| Remote Replication | Optional | Replication pairs per source volume: 8 Replication pairs per system: 64 Note: The maximum number of replication pairs per source volume is 8, whether they are remote asynchronous pairs, remote synchronous pairs, or local volume pairs | |
| Automated Storage Tiering | Optional | Storage tiers per pool: 4 | |
| SSD Cache | Optional | Accelerating data access in random read-intensive environments (e.g. OLTP) Max. SSD number: 4 | |
| | | DRAM : 8GB | Max SSD cache pool size : 1TB |
| | | DRAM : 16GB | Max SSD cache pool size : 2TB |
| | | DRAM : 32GB | Max SSD cache pool size : 4TB |

WARRANTY AND SERVICE

| | | |
|---------------------|------------------------------|---|
| Service and Support | Standard Service | 3-year limited hardware warranty and 8 x 5 phone, web, and email support (batteries are covered under warranty for 2 years) |
| | Upgrade or Extension Options | Warranty extension: Standard service can be extended up to 5 years. The following services can be upgraded to 5 years. <ul style="list-style-type: none"> Upgrade: Replacement part dispatch on the next business day Advanced service: Phone, web, and email support + onsite diagnostics on the next business day Premium service: Phone, web, and email support + onsite diagnostics within 4 hours Note: Options may vary by region. For more details, please contact our sales representatives. |
| | Technical Support | Get information on system installation and maintenance, download technical documents and software, or issue a support ticket |
| | Product Services | Register products, download firmware, apply for licensing services, create product repair tickets, or check product repair status |

Asia Pacific (New Taipei, Taiwan)
 Infortrend Technology, Inc.
 Tel : +886-2-2226-0126
 E-mail : sales.ap@infortrend.com

China (Beijing, China)
 Infortrend Technology, Ltd.
 Tel : +86-10-6310-6168
 E-mail : sales.cn@infortrend.com

Japan (Tokyo, Japan)
 Infortrend Japan, Inc.
 Tel : +81-3-5730-6551
 E-mail : sales.jp@infortrend.com

Americas (Sunnyvale, CA, USA)
 Infortrend Corporation
 Tel : +1-408-988-5088
 E-mail : sales.us@infortrend.com

EMEA (Düsseldorf, Germany)
 Infortrend Technology, Inc.
 E-mail : sales.de@infortrend.com



• Any information provided herein is without warranties of any kind of and is subject to change without prior notice.
 • Copyright © 1999-2026 Infortrend Technology, Inc. Copyright to the documents and programs on the Site(s) is owned and/or performed by Infortrend Technology, Inc. All rights reserved.
 • Infortrend, SANWatch, EonOne, EonStor and EonServ are registered trademarks or trademarks of Infortrend Technology, Inc. Other names prefixed with "IFT", "DS", "CS", "GS", "GSe", "GSe Pro", "GSx", and "KS" are trademarks or brand names of Infortrend Technology, Inc. All other names, brands, products or services are trademarks or registered trademarks of their respective owners.