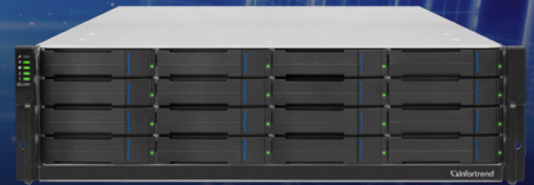




EonStor GSe Family

Cloud-Integrated Unified Storage for SMB Data Storage, Backup and Sharing



Highlight

PERFORMANCE

- Consolidate SAN, NAS and cloud in a single system.
- All-flash and hybrid configurations provide flexibility of choice.
- Multi-core CPU for enhanced performances.
- Supports up to 256GB RAM.

FLEXIBLE INTERFACE OPTIONS

- Modular dual host board controller with integrated FC, SAS and iSCSI, protocols maximizes connection versatility for hosts.

APPLICATIONS & DATA PROTECTION

- With various built-in services including proxy, LDAP, syslog and VPN server to assist enterprises simplify their IT environment deployment.
- Integrated full-featured RAID protection.
- Integrated backup functions such as snapshot, volume copy, mirror, rsync, IDR and local / remote replication.

Introduction

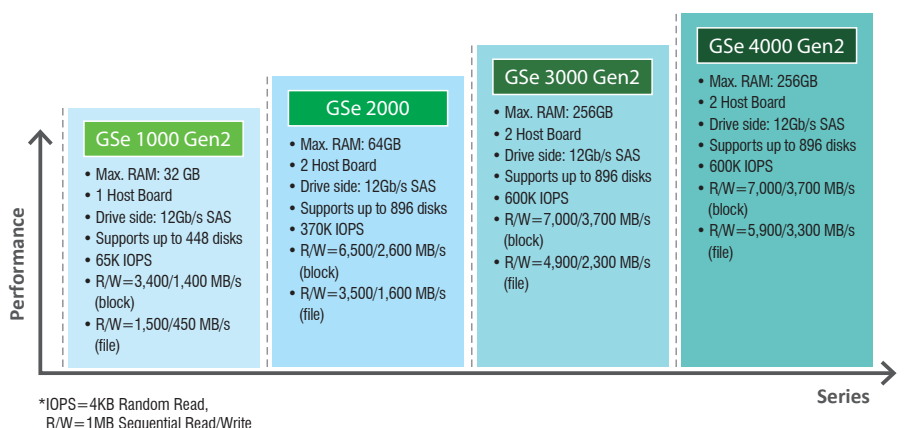
The EonStor GSe Family, including its 1000, 2000, 3000 and 4000 Series, offers unified storage solutions that incorporate full-featured NAS and SAN with enterprise level data services and RAID protection to deliver the best storage of the highest standards without sacrificing affordability. Moreover, with the option of cloud-integration, EonStor GSe Family allows SMBs and SMEs running local SAN/NAS applications to easily and cost-effectively integrate and expand their storage architecture into cloud services.

Unified Storage System

The EonStor GSe Family enables businesses to cost-effectively manage data and reduce total cost of ownership by integrating file level and block level storage into one unified storage system.

Based on improved hardware and firmware, EonStor GSe Family can handle file level protocols including CIFS, NFS, AFP and FTP; block level protocols such as Fiber Channel, iSCSI and SAS.

By integrating these protocols and harnessing the power of Intel's multi-core CPU, the EonStor GSe Family delivers not only outstanding flexibility but also incredible performance in either all-flash or hybrid configurations. Moreover, by offering hybrid features such as SSD Cache, automated storage tiering to accelerate performance and optimize utilization of HDDs, SSDs, and RAID levels to enhance ROI, the EonStor GSe Family guarantees great performances at every level of operation.





Cloud Ready

- The EonStor GSe can integrate with cloud storage, and data can be optimally allocated between EonStor GSe and Cloud through our smart algorithms, so users can enjoy the best performance and the safest storage.
- EonStor GSe offers comprehensive cloud integration functions for users to choose from: Cloud Tiering, Cloud Cache and Cloud Backup.

Availability & Reliability

- Dual power supplies and cooling fans ensure constant uptime and service stability.
- Super-capacitor with Flash ensure data safety.

Connectivity & Simple Maintenance

- Modular design simplifies maintenance and ensures uninterrupted operations.

Wide Product Range

- Provides users with a wide range of products to choose from according to their specific needs.

Intuitive GUI

- EonOne management interface provides a single control center for system management and resources monitoring.

Comprehensive Business Applications & Data Protection

1. Integration with Microsoft Active Directory AD and LDAP

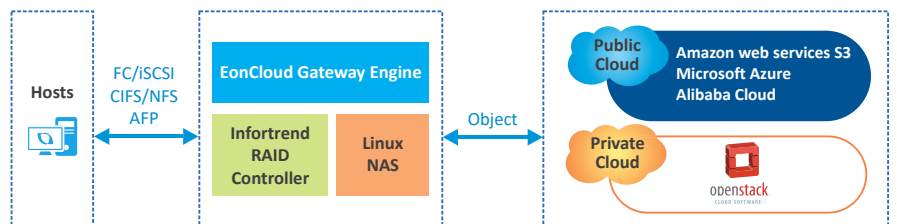
The EonStor GSe Family provides easy integration with existing business network environments through Microsoft® Active Directory (AD) and LDAP directory services, which allow MIS to easily configure access rights of every user account in a share folder through ACL. Furthermore, EonStor GSe has perfectly integrated the LDAP Server function into the system, so customers do not need to construct additional LDAP Servers.

2. Comprehensive Data Service

The EonStor GSe Family minimizes the risk of data loss from unexpected disk failures, natural disasters and power outages thanks to its integrated backup functions such as Intelligent Drive Recovery (IDR), snapshot, local / remote replication, and file-level rsync.

3. Complete cloud functions

By integrating Intelligent Cloud Gateway Engine and supporting a wide range of both private cloud and public cloud services, including Amazon, Azure, and the EonStor GSe offers various cloud functions such as Cloud Tiering, Cloud Cache and Cloud Backup to make the most of cloud's advantages. These functions perfectly combine local and cloud storage, automatically and optimally allocating data, while saving setup and maintenance costs in the process.



Availability & Reliability

The EonStor GSe Family has been thoroughly designed to operate with high data availability, such as dual power supplies and dual cooling fans. This design keeps data alive at all times, while Super-capacitor with Flash also ensure the data is not lost.

Connectivity and Simple Administration Effort

The EonStor GSe Family features a modular design, such as hot-swappable fans and power supplies, to simplify maintenance and ensure uninterrupted operations.

PHYSICAL SPECIFICATIONS

Product Series		GSe 1000 Gen2	GSe 2000	GSe 3000 Gen2	GSe 4000 Gen2
Form Factor	2U 12-bay	GSe 1012 2	GSe 2012 / GSe 2012T	GSe 3016 2	GSe 4016 2
	3U 16-bay	GSe 1016 2	GSe 2016 / GSe 2016T	GSe 3024 2	GSe 4024 2
Note: T: High performance 2: Gen2					
Controller	Single Controller				
Cache Backup Techniques	Super capacitor+Flash module				
CPU	Intel® Avoton® 4-Core	Intel® Pentium® 2 or 4-Core	Intel® Xeon® 4-Core	Intel® Xeon® 8-Core	
Cache Memory	Default DDR3 8GB Expantable up to 16GB	Default DDR4 8GB Expantable up to 64GB	Default DDR4 8GB Expandable up to 256GB		
Supported Drives	2.5" SAS or SATA SSD 2.5" 12Gb/s SAS 10,000 or 15,000 RPM HDD 3.5" 12Gb/s SAS 7,200 RPM HDD 3.5" 6Gb/s SATA 7,200 RPM HDD				
Note: For the latest compatibility details, refer to our official website for the latest Compatibility Matrix.					
Max. Drives Number	448	896 (with expansion board)			
Max. SSD Cache Pool	600GB	1.6TB	4TB	4TB	
Max. Onboard SAS Expansion Ports	1	2	2	2	
Max. Onboard 1GbE Ports	4	4	0	0	
Max. Onboard 10 GbE Ports (RJ-45)	0	0	4	4	
Max. Host Board Slots	1	2	2	2	
Max. Expansion Board	0	1	1	1	
Note: The expansion board can only be installed in the HB2 slot and has 2 x 12Gb/s SAS ports only connectable with expansion enclosures.					
Host Board Options	16Gb/s FC x 4 32Gb/s FC x 2 1GbE (RJ-45) x 4 10GbE (SFP+) x 2 10GbE (RJ-45) x 2 25GbE (SFP28) x 2 40GbE (QSFP+) x 2 12Gb/s SAS x 2		16Gb/s FC x 4 32Gb/s FC x 2 32Gb/s FC x 4 10GbE (SFP+) x 2 10GbE (RJ-45) x 2 25GbE (SFP28) x 2 40GbE (QSFP+) x 2 12Gb/s SAS x 2		
Note: 1. The two controllers must have identical slot settings. 2. Fibre channel supports point-to-point and switch mode. 3. The expansion board can only be installed in the HB2 slot and has 12Gb/s SAS x 2 ports only connectable with expansion enclosures.					
Max. 16Gb/s FC Ports	4	8	4	4	
Max. 32Gb/s FC Ports	2	4	4	4	
Max. 1 GbE Ports	8	12	0	0	
Max. 10GbE Ports (RJ-45)	2	4	4	4	
Max. 10GbE Ports (SFP+)	2	4	8	8	
Max. 25GbE Ports (SFP28)	2	4	4	4	
Max. 40GbE Ports (QSFP+)	2	4	4	4	
Max. 12Gb/s SAS Ports	3	6	6	6	
Expansion Enclosure (JBOD)	JB 3012A , JB 3016A, JB 3025BA, JB 3024BA, JB 3060L			JB 3012A , JB 3016A, JB 3025BA, JB 3060L	
Dimensions (without chassis ears/ protrusions) (W x H x D)	2U 12-bay: 449 x 88 x 500 mm 2U 24-bay: 449 x 88 x 500 mm 2U 25-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 4U 60-bay: 447.6 x 176 x 840.9 mm	
Package Dimensions (W x H x D)	2U 12-bay: 780 x 379 x 588 mm 2U 24-bay: 780 x 338 x 588 mm 2U 25-bay: 780 x 340 x 588 mm			3U 16-bay: 780 x 423 x 588 mm 4U 24-bay: 780 x 465 x 588 mm 4U 60-bay: 620 x 460 x 1140 mm	
Power Supply Unit (with fan module)	Power Supplies (Redundant/hot-swappable)	460W x 2 (80 PLUS Bronze)	530W x 2 (80 PLUS Bronze)		
	AC Voltage (with PFC(auto-switching))	100VAC @8A to 240VAC @4A	100VAC @10A to 240VAC @5A		
	Frequency	50-60 Hz	47-63Hz		
Note: Power is also supplied in redundant mode, allowing full operation with half the resources.					
Safety Standard	<ul style="list-style-type: none"> Electromagnetic Compatibility: CE, BSMI, FCC Safety: UL, BSMI, CB 				

SOFTWARE SPECIFICATIONS

Max. Logical Drives Number	32		
Max. Logical Drives Capacity	512 TB		
Configurable Stripe Size	16KB, 32KB, 64KB, 128KB, 256KB, 512KB, or 1024KB per logical drive		
Configurable Writes Policy	Write-Back or Write-Through per logical drive. This policy can be modified.		
Max. Pool Size	2PB		
Max. Pool Number	32		
Max. Volume Size	2PB		
Max. Volume Number (per pool/per system)	1024		
Max. Host LUN Mapping Number	4096		
Max. Reserved Tag Number per Host-LUN Connection	Up to 256		
Max. iSCSI Initiators (per controller)	832		
Max. Host Connection Number (per FC)	128		
RAID Options	RAID 0, RAID 1, RAID 3, RAID 5, RAID 6, RAID 10, RAID 30, RAID 50, RAID 60		
Protocol Support	File Level Protocol	CIFS/SMB (Version 2.0/3.0), NFS (Version 2/3/4), AFP (Version 3.1.12), FTP/FXP (vsftpd 2.3.4), WebDAV (httpd package 2.4.6)	
	Block Level Protocol	FC, iSCSI, SAS	
	Object Level Protocol	RESTful API	
File Level	Max. File System Size	2PB	
	Max. Number of User Accounts	20000	
	Max. Number of User Groups	512	
	Max. Number of Folder Sharing	2048 (NFS/CIFS/FTP) 255 (AFP)	
	Max. Number of Rsync Jobs	1024	
	Max. Number of Rsync Concurrent Processes	64	
	Max. Number of Concurrent Connections (NFS/CIFS/AFP/FTP)	<ul style="list-style-type: none"> • 16 GB memory: 200 • 32 GB memory: 512 • 64 GB memory: 1024 • 128 GB memory: 2048 	
Management	<ul style="list-style-type: none"> • User account management • Group management • Folder management - folder access control • Quota management 	<ul style="list-style-type: none"> • Integration with Microsoft Active Directory (AD) and LDAP • Folder encryption with AES • Web-based EonOne management software • Storage Resource Management to analyze history records of resource usage 	
Availability and Reliability	<ul style="list-style-type: none"> • Redundant, hot-swappable hardware modules • Device mapper support • Antivirus • Trunk group support 	<ul style="list-style-type: none"> • Cache Safe technology • UPS • WORM (For file level only) • SMB Multichannel 	
Notification	<ul style="list-style-type: none"> • Email 	<ul style="list-style-type: none"> • SNMP traps 	
Applications	<ul style="list-style-type: none"> • File explorer • Proxy server 	<ul style="list-style-type: none"> • Syslog server • VPN server 	<ul style="list-style-type: none"> • LDAP serve • Docker
Cloud Feature	<p>EonCloud Gateway supports the integration with following cloud providers: Amazon S3, Microsoft Azure, Alibaba Cloud, OpenStack, Baidu Cloud, Google Cloud, Tencent Cloud, Wasabi Cloud, etc.</p> <p>For complete information about cloud provides support, please refer to EonCloud Gateway webpage https://www.infortrend.com/global/solutions/eoncloud</p>		
OS Support	<p>Microsoft Windows Server 2019/2016/2012R2/2012/2008R2/2008, Windows 7 SP1, Windows 8.1, Microsoft Windows Hyper-V, Ret Hat Enterprise Linux, SUSE Linux Enterprise, Sun Solaris, Mac OS X, VMware, Citrix XenServer, OpenStack Cinder</p>		
	<p>Note: For OS version support, please refer to the compatibility matrix.</p>		

DATA SERVICE

Self-encrypting Drives	Unique factory encryption secures data plus makes deletion simple and complete
Thin Provisioning (Block-Level) (default included)	"Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space
Local Replication	Snapshot
	Snapshot images per source volume Standard License: 64 / Advanced License: 256
	Snapshot images per pool Standard License: 128 / Advanced License: 4096
	Volume Copy/Mirror
Replication pairs per source volume Standard License: 4 / Advanced License: 8	
Replication pairs per system Standard License: 16 / Advanced License: 256	
Note: Standard license is included by default and advanced is an optional license	
Remote Replication (Block level)(optional)	Replication pairs per source volume: 8
	Replication pairs per system: 64
	Note: 1. The maximum number of replication pair per source volume is up to 8, regardless of remote asynchronous/remote synchronous/local volume pairs. 2. 4 x 16Gb FC and 2/4 x 32Gb FC host boards do not support Remote Replication.
Remote Replication (File Level)	Support Rsync with 128-bit SSH encryption
Automated Storage Tiering (optional)	2 or 4 storage tiers based on drive types
	SSD supports
	Automated data migration with scheduling options
SSD Cache (Default Included)	Accelerating data access for random read-intensive environments, such as OLTP
	Supports up to four SSDs per controller
	Recommended DIMM capacity for SSD Cache pool:
	DRAM:8GB Max SSD Cache Pool Size: 400GB
	DRAM:16GB Max SSD Cache Pool Size: 600GB
	DRAM:32GB Max SSD Cache Pool Size: 1,000GB
	DRAM:64GB Max SSD Cache Pool Size: 1,600GB
DRAM:128GB and up Max SSD Cache Pool Size: 3,200GB	

WARRANTY AND SERVICE

Service and Support	Standard Service	3-year limited hardware warranty and 8x5 phone, web, and email support (batteries are covered under warranty for 2 years)
	Upgrade or Extension Options	Warranty extension: Can extended standard service up to 5 years The following Service can be upgraded to 5 years
		<ul style="list-style-type: none"> • Upgrade: Replacement part dispatch on the next business day • Advanced service: 24x7 phone, web, and email support + onsite diagnostics on the next business day • Premium service: 24x7 phone, web, and email support + onsite diagnostics in 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	

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