



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 128GB 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.
- Supports SED hard drives for better data protection.

Introduction

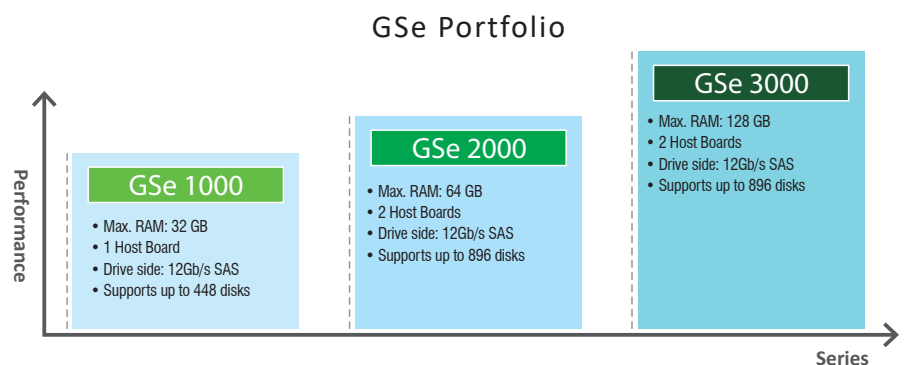
The EonStor GSe Family, including its 1000, 2000, and 3000 Series, offers unified storage solutions that incorporate full-featured NAS and SAN with enterprise level data services and RAID protection to deliver the best storage of the highest standards without sacrificing affordability. Moreover, with 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. It delivers up to 230K IOPS, 5800MB/s for read, and 4200MB/s for write. 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

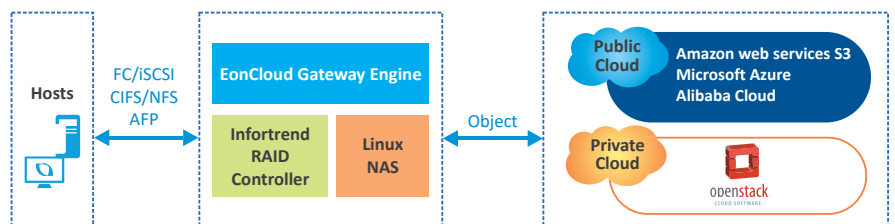
The EonStor GSe Family provides easy integration with existing business network environments through Windows® AD and LDAP directory services, which allow MIS to easily configure access rights of every user account in a share folder through ACL. Furthermore, EonStor GSe has perfectly integrated the LDAP 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 Gen1
Form Factor	2U 12-bay	GSe 1012 2	GSe 2012 / GSe 2012T	GSe 3012/ GSe 3012T
	3U 16-bay	GSe 1016 2	GSe 2016 / GSe 2016T	GSe 3016/ GSe 3016T
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 or 6 Core	
Cache Memory	Default DDR3 8GB Expantable up to 16GB	Default DDR4 8GB Expantable up to 64GB	Default DDR4 8GB Expandable up to 128GB	
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	3.2TB	
Max. Onboard SAS Expansion Ports	1	2	2	
Max. Onboard 1GbE Ports	4	4	2	
Max. Onboard 10 GbE Ports (RJ-45)	0	0	2	
Max. Host Board Slots	1	2	2	
Max. Expansion Board	0	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			
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	8	
Max. 32Gb/s FC Ports	2	4	4	
Max. 1 GbE Ports	8	12	10	
Max. 10GbE Ports (RJ-45)	2	4	6	
Max. 10GbE Ports (SFP+)	2	4	4	
Max. 25GbE Ports (SFP28)	2	4	4	
Max. 40GbE Ports (QSFP+)	2	4	4	
Max. 12Gb/s SAS Ports	3	6	6	
Expansion Enclosure (JBOD)	JB 3012A , JB 3016A, JB 3025BA, JB 3024BA, JB 3060L			
Dimensions (without chassis ears/ protrusions) (W x H x D)			2U 12-bay: 449 x 88 x 500 mm 3U 16-bay: 449 x 130 x 500 mm	
Package Dimensions (W x H x D)			2U 12-bay: 780 x 379 x 588 mm 3U 16-bay: 780 x 423 x 588 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 2.2.2), 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
Management	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
		<ul style="list-style-type: none"> • User account management • Group management • Folder management - folder access control • Quota management • 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 • Cache Safe technology • UPS • WORM (For file level only) • SMB Multichannel 	
Notification	Email, SNMP traps	
Applications	<ul style="list-style-type: none"> • File explorer • Proxy server • Syslog server • VPN server • LDAP serve • Docker 	
Cloud Feature	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. For complete information about cloud provides support, please refer to EonCloud Gateway webpage	
OS Support	Microsoft Windows Server 2019/2016/2012R2/2012/2008R2/2008, Windows 7 SP1, Windows 8.1, Microsoft Windows Hyper-V, Red Hat Enterprise Linux, SUSE Linux Enterprise, Sun Solaris, Mac OS X, VMware, Citrix XenServer, OpenStack Cinder	
	Note: For OS version support, please refer to the compatibility matrix	

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(optional)	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	<p>Warranty extension: Can extended standard service up to 5 years The following Service can be upgraded to 5 years</p> <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 <p>Note: Options may vary by region. For more details, please contact our sales representatives.</p>
	Infotrend Technical Support	FAQ, Download Center, Licensing Service, Service Request

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

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

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

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

EMEA (Basingstoke, UK)
Infotrend Europe Ltd.
Tel : +44(0)-1256-305-220
E-mail : sales.eu@infotrend.com

