



EonStor GSe Family

Scale-out Unified Storage for SMB



Highlights

High Performance and Scalability

- Up to 600K end-to-end IOPS
- Up to 7GB/s in throughput
- Scale-out and scale-up expansion to easily increase performance and capacity

Flexible Interface Options

- Modular host boards with FC, SAS, and iSCSI protocols for host connection

Applications & Data Protection

- Various built-in applications, including Proxy server, LDAP server, Syslog server, and VPN server.
- Integrated full-featured RAID protection.
- Rich backup functions, including snapshot, volume copy, volume mirror, rsync, and IDR.
- Crucial security features against ransomware attacks, including immutable object storage, WORM, and multi-factor authentication.

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 feature 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, the EonStor GSe Family supports file-level protocols, including CIFS, NFS, AFP and FTP, as well as block-level protocols such as Fiber Channel, iSCSI, and SAS.

By integrating these protocols and harnessing the power of Intel® multi-core CPU, the EonStor GSe Family delivers not only outstanding flexibility but also incredible performance in either all-flash or hybrid configurations. Moreover, with its RAID protection and hybrid-specific features such as SSD cache and automated storage tiering, the EonStor GSe Family accelerates performance and optimizes utilization of HDDs and SSDs, bringing increased ROI with great performance at every level of operation.



Cloud Ready

- Integration with cloud storage to allocate data between EonStor GSe and cloud services via smart algorithms.
- Comprehensive cloud integration features, including cloud tiering, cloud cache, and cloud backup.

Availability & Reliability

- Dual power supplies and cooling fans to ensure continuous uptime and service stability.
- Super capacitor and a flash module to ensure data safety during power outage.

Connectivity & Simple Maintenance

- Modular hardware design to simplify maintenance and ensure uninterrupted operations

Intuitive GUI

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

Comprehensive Business Applications & Data Protection

Integration with Microsoft 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 allows system administrators to easily configure shared folder access permission by user account 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.

Comprehensive Data Services

The EonStor GSe Family comes with inline compression and offline deduplication for the Btrfs filesystem, which reduces the overall storage capacity required and thus saves costs.

To minimize the risk of data loss from unexpected disk failures, natural disasters, and power outages, the EonStor GSe Family supports various backup features, such as Intelligent Drive Recovery (IDR), snapshot, local/remote replication, and file-level rsync.

The EonStor GSe Family also incorporates crucial safety features to safeguard data from ransomware attacks. With immutable object storage, it retains data with WORM (write once read many) storage protection, where data gets “locked” and therefore cannot be modified, deleted, overwritten, or even encrypted by ransomware. By setting the retention period, you can easily follow government compliance requirements or company policies on data retention. To provide further security for administrative account access, multi-factor authentication (MFA) is also supported to reduce the risk of malicious attacks following password theft.

Complete Cloud Features

Integrated with the Intelligent Cloud Gateway Engine, the EonStor GSe Family supports a wide range of both private and public cloud services, including Amazon S3 and Microsoft Azure, and offers various cloud features such as cloud tiering, cloud cache, and cloud backup to make the most out of cloud storage. Combining local and cloud storage, these features allocate data in an automatic and optimal manner while saving setup and maintenance costs.

Availability & Reliability

The EonStor GSe Family is equipped with dual power supplies and cooling fans to help ensure high data availability. The Cache Backup Module (CBM) consists of a super capacitor and a flash module to prevent data loss during a power interruption or outage.

Connectivity and Simple Administration Effort

The EonStor GSe Family features a modular hardware design, including hot-swappable fans and power supply units, to simplify maintenance and ensure continuous 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	-	-
	3U 16-bay	GSe 1016 2	GSe 2016 / GSe 2016T	GSe 3016 2	GSe 4016 2
	4U 24-bay	-	-	GSe 3024 2	GSe 4024 2
		Note: 2: Gen2 T: High performance			
Controller	Single				
Cache Backup Technology (optional)	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 (per system)	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 NL-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. Drive Number	448	896 (with expansion board)			
Max. Block-level SSD Cache Pool	0.6TB	1.6TB	4TB	4TB	
Onboard SAS Expansion Port	1	1	2	2	
Onboard 1GbE Ports (RJ-45)	4	4	0	0	
Onboard 10GbE Ports (SFP+)	0	0	4	4	
Max. Host Board Slots	1	2	2	2	
Max. Expansion Boards (12Gb/s SAS x 2)	0	1	1	1	
Host Board Options	16Gb/s FC x 4 32Gb/s FC x 2 1GbE (RJ-45) x 4 10GbE (SFP+) 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 25GbE (SFP28) x 2 40GbE (QSFP+) x 2 12Gb/s SAS x 2		
		Note: For more details, refer to our website for the latest Host Board and Memory Guide.			
Max. 16Gb/s FC Ports	4	8	8	8	
Max. 32Gb/s FC Ports	2	4	4	4	
Max. 1GbE Ports	8	12	0	0	
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	3	4	4	
Expansion Enclosures (JBODs)	JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, JB 3060L			JB 3012A, JB 3016A, JB 3025BA, JB 3060L	
Dimensions (Without Chassis Ears and Protrusions) (W x H x D)	2U 12-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)	2U 12-bay: 780 x 379 x 588 mm 3U 16-bay: 780 x 423 x 588 mm 4U 24-bay: 780 x 465 x 588 mm				
Power Supply Unit	Power Supplies (Redundant and Hot-swappable)	460W x 2 (80 PLUS Bronze)		530W x 2 (80 PLUS Bronze)	
	AC Voltage	100VAC @8A to 240VAC @4A		100VAC @10A to 240VAC @5A	
	Frequency	50-60 HZ		47-63 HZ	
Safety Standard	<ul style="list-style-type: none"> Electromagnetic Compatibility: CE, BSMI, FCC Safety: UL/cUL, BSMI, CB 				

SOFTWARE SPECIFICATIONS

Max. Logical Drive Number	30	
Max. Logical Drive Capacity	512TB	
Stripe Size	16KB, 32KB, 64KB, 128KB, 256KB, 512KB, or 1024KB per logical drive	
Write Policy	Write-Back or write-through per logical drive.	
Max. Pool Size	2PB	
Max. Pool Number	30	
Max. Volume Size	2PB	
Max. Volume Number	1024	
Max. Host LUN Mapping Number	4096	
Max. Reserved Tag Number (per Host-LUN Connection)	256	
Max. iSCSI Initiators (per Controller)	416	
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	
Supported Protocols	File Level	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	FC, iSCSI, SAS
	Object Level	RESTful API
File Level	Max. File System Size	2PB
	Max. Number of User Accounts	20000
	Max. Number of User Groups	512
	Max. Number of Shared Folder	2048 (NFS/CIFS/FTP) 255 (AFP)
	Max. Number of Rsync Jobs	1024
	Max. Number of Concurrent Rsync Processes	64
	Max. Number of Connections	2048 (NFS/CIFS/AFP) 1024 (FTP)
Management	<ul style="list-style-type: none"> • Multi-factor authentication login mechanism • Web-based EonOne management software • User account management • Group management • Folder management - folder access control 	<ul style="list-style-type: none"> • Quota management • Folder encryption with AES • Integration with Microsoft Active Directory (AD) and Linux LDAP • Storage Resource Management to analyze history of resource usage
Availability and Reliability	<ul style="list-style-type: none"> • Immutable object storage • Hot-swappable hardware modules • Device mapper • Antivirus • Trunk group 	<ul style="list-style-type: none"> • Cache safe technology • UPS • WORM (file level only) • SMB Multichannel
Efficiency	<ul style="list-style-type: none"> • Inline compression • Offline deduplication 	
Notification	<ul style="list-style-type: none"> • Email • SNMP traps 	
Applications	<ul style="list-style-type: none"> • Web-based file explorer • Proxy server • Syslog server • VPN server • LDAP server • Docker 	
Supported Cloud Services	<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. For complete information about cloud provides support, please refer to EonCloud Gateway webpage https://www.infortrend.com/global/solutions/eoncloud</p>	
Supported OS	<p>Microsoft Windows Server, Red Hat Enterprise Linux, Mac OS X, VMware</p> <p>Note: For the latest compatibility details, refer to our official website for the latest Compatibility Matrix.</p>	

DATA SERVICES

Thin Provisioning	Default	"Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space.	
Local Replication	File level	Optional Snapshot images per folder: 1024	
	Snapshot	Block level	Default Snapshot images per source volume: 64 Snapshot images per pool: 128
		Optional Snapshot images per source volume: 256 Snapshot images per pool: 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	File level	Default Support Rsync with 128-bit SSH encryption	
	Block level	Optional Replication pairs per source volume: 8 Replication pairs per system: 64 Note: 1. The maximum number of replication pairs per source volume is 8, whether they are remote asynchronous pairs, remote synchronous pairs, or local volume pairs. 2. 16Gb FC x 4, 32Gb FC x 2, and 32Gb FC x 4 host boards do not support Remote Replication.	
Automated Storage Tiering	Optional	Storage tiers per pool: 4	
Scale-out	File level	Default Appliances per cluster: 1	
		Optional Appliances per cluster: 4	
	Block level	Default Appliances per cluster: 4	
SSD Cache	File level	Optional Accelerating file operations and data access performance for both read and write Max. SSD number per controller: 8	
	Block level	Optional	Accelerating data access in random read-intensive environments (e.g. OLTP)
			Max. SSD number per controller: 4
			Recommended DIMM capacity per controller for SSD Cache pool for GSe 1000 Gen2, GS 2000
			DRAM: 8GB Max SSD Cache Pool Size: 0.4TB
			DRAM: 16GB Max SSD Cache Pool Size: 0.6TB
			DRAM: 32GB Max SSD Cache Pool Size: 1TB
			DRAM: 64GB Max SSD Cache Pool Size: 1.6TB
			DRAM: 128GB and up Max SSD Cache Pool Size: 3.2TB
			Recommended DIMM capacity per controller for SSD Cache pool for GSe 3000/4000 Gen2
			DRAM: 8GB Max SSD Cache Pool Size: 0.5TB
			DRAM: 16GB Max SSD Cache Pool Size: 1TB
			DRAM: 32GB Max SSD Cache Pool Size: 2TB
			DRAM: 64GB and up Max SSD Cache Pool Size: 4TB

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: Standard service can be extended up to 5 years. The following service can be upgraded to 5 years. • 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

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

