



EonStor GS Family

Enterprise-Class Unified Storage

Integrating SAN, NAS and Cloud



Highlight

- Consolidates SAN, NAS and Cloud in a single system to enjoy powerful storage features
- Automatically reconnected I/O during path failure
- Cache protection with super-capacitor and flash to ensure data safety
- IDR support ensures that all hard drives are healthy to prevent from rebuilding
- EonOne management interface provides a single control center for system management and resources monitoring

Introduction

The EonStor GS series forms the backbone of our high-performance enterprise storage solution with its powerful performance, flexibility, and high expandability helping to efficiently boost overall productivity. GS can handle large amounts of I/O and file transfers even under high workloads and are especially suitable for hybrid environments adopting SAN, NAS, and Cloud integration. It is perfect for those who want performance, capacity, and a high port count, and at the same time, it is ideal for budget-conscious applications as it can easily meet all general storage needs.

Symmetric Active-active Controllers

The EonStor GS Series supports symmetric active-active controller configuration for block-level data access to achieve little or no failover time in the event of a path failure.

This design is also able to minimize administrative efforts and boost operation efficiency. Hosts can access the same LUNs simultaneously via both controllers. I/O workloads are more evenly distributed across both controllers and all paths, effectively minimizing costly path management time.

Infinite Storage Capacity on Cloud

The key benefits of cloud storage solutions are their high service durability and the “scale on demand” flexibility allowing to expand storage as your business evolves. As a great on-premises cache/backup storage to cloud storage, EonCloud Gateway features both a wide range integration for both private cloud and public cloud solutions and smart data services such as heterogeneous cache modes, tiering and backup modes to automatically streamline the optimal data flow between local and cloud storage and also save costs.

Comprehensive Data Protection and Security

Security threats are not the only concern when it comes to safeguarding data. Unexpected disk failures, natural disasters, and power outages - all add up to the risk of data loss. EonStor GS series ensures that risk is minimal with its integrated backup functions such as Intelligent Drive Recovery (IDR), snapshot, local replication, remote replication, and file-level rsync.

PHYSICAL SPECIFICATIONS

Product Series		GS 1000 Gen2	GS 2000	GS 3000 Gen2	GS 4000 Gen2
Form Factor & Available Model	2U 12-bay	GS 1012 R2CF/S2CF	GS 2012 R/S GS 2012 RT/ST	GS 3012 R2CF/S2CF	GS 4012 R2CF/S2CF
	2U 24-bay	GS 1024 R2CBF/S2CBF	GS 2024 RB/SB GS 2024 RTB/STB	-	-
	2U 25-bay	-	-	GS 3025 R2CBF/S2CBF	GS 4025 R2CBF/S2CBF
	3U 16-bay	GS 1016 R2CF/S2CF	GS 2016 R/S GS 2016 RT/ST	GS 3016 R2CF/S2CF	GS 4016 R2CF/S2CF
	4U 24-bay	GS 1024 R2CF/S2CF	GS 2024 R/S GS 2024 RT/ST	GS 3024 R2CF/S2CF	GS 4024 R2CF/S2CF
	4U 60-bay	-	-	GS 3060 R2CLF/G2LF	GS 4060 R2CLF/G2LF
		Note: G : Non upgradable single controller S : Upgradable single controller R : Redundant controller L : One drawer B : 2.5" Form factor 2 : Gen2 C : Super capacitor F : Gateway			
Controller	Redundant or Upgradable single controller			Redundant or Non upgradable single controller or Upgradable single controller	
Cache Backup Techniques	Super capacitor+Flash module (Only for upgradable single controller and redundant controller models)				
CPU	Intel® Atom® 4 Core	Intel ® Pentium® 2 or 4 core		Intel ® Xeon® D 4 Core	Intel® Xeon® D 8 Core
Cache Memory (per system)	Default DDR3 16GB Expandable up to 32GB	Default DDR4 16GB Expandable up to 128GB		Default DDR4 16GB Expandable up to 512GB	
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 (via expansion enclosure)	448	896		896	896
Max. SSD Cache Pool	1TB	3.2TB		4TB	4TB
Onboard SAS Expansion Ports	2	2		4	4
Onboard 1GbE Ports	8	8		0	0
Onboard 10 GbE Ports (SFP+)	0	0		8	8
Max. Host Board Slots	2	4		4	4
	0	2		2	2
Max. Expansion Board	Note: The expansion board can only be installed in the HB2 slot and has 12Gb/s SAS x 2 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.				
Max. 16Gb/s FC Ports	8	16		16	16
Max. 32Gb/s FC Ports	4	8		16	16
Max. 1 GbE Ports	16	24		0	0
Max. 10GbE Ports (RJ-45)	4	8		8	8
Max. 10GbE Ports (SFP+)	4	8		16	16
Max. 25GbE Ports (SFP28)	4	8		8	8
Max. 40GbE Ports (QSFP+)	4	8		8	8
Max. 12Gb/s SAS Ports	6	10		12	12
Expansion Enclosure (JBOD)	JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, 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)	GS 3000/4000: 530W x2 (80 PLUS Bronze) GS 3060L/4060L: 1200W x 2 (80 PLUS Platinum)		
	AC Voltage (with PFC(auto-switching))	100VAC @10A to 240VAC @5A	GS 3000/4000: 100VAC @10A to 240VAC @5A GS 3060L/4060L: 100-127VAC @12.47A, 200-240VAC @7.08A		
	Frequency	50-60 Hz	GS 3000/4000: 50-60 Hz GS 3060L/4060L: 47-63 Hz		
		Note: Power is also supplied in redundant mode, allowing full operation with half the resources.			
Safety Standard	• 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 (vsftp 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 • SNMP traps 	
Applications	<ul style="list-style-type: none"> • File explorer • Proxy server • Syslog server • VPN server • 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(optional)	Accelerating data access for random read-intensive environments, such as OLTP		
	Supports up to four SSDs per controller		
	Recommended DIMM capacity per controller for SSD Cache pool for GS 1000 Gen2, GS 2000		
	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	
	Recommended DIMM capacity per controller for SSD Cache pool for GS 3000/4000 Gen2		
	DRAM:8GB	Max SSD Cache Pool Size: 500GB	
	DRAM:16GB	Max SSD Cache Pool Size: 1,000GB	
	DRAM:32GB	Max SSD Cache Pool Size: 2,000GB	
	DRAM:64GB and up	Max SSD Cache Pool Size: 4,000GB	

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
	Product Services	Register products, download firmware, apply for licensing services, create product repair tickets, or check product repair status

Thailand : E-Rong Consultants Co.,Ltd. | Tel : 02-664-6588 | E-mail : sales@e-rong.co.th

www.e-rong.co.th
E-mail : sales@e-rong.co.th
Line official ID:@e-rongconsultants



ERONG
E-Rong Consultants Co., Ltd.
THINK OF TECHNOLOGY THINK OF E-RONG



EonStor GS Media and Entertainment Series

*Shared Media Storage
for Video Collaboration*



Highlight

HIGH PERFORMANCE AND SCALABILITY

Supports 26 streams of 4K video editing and playback. Holds up to 896 drives with expansion enclosures

COMPLETE PRODUCT LINE

GS is represented with various form factors and levels of performance for all types of media workloads to fit your budget and requirements

IMPROVED PRODUCTIVITY

Supports DaVinci Resolve, Adobe Premiere, and Final Cut Pro NLE software for easy project collaboration

HIGH AVAILABILITY

Innovative data protection technologies and cableless redundant hardware design

FLEXIBLE IO CONNECTIONS

Supports diverse network protocols and operating systems to fit in any IT environment

EASY-TO-USE

Easy setup and effortless storage/media management via web-based management software. DaVinci Resolve Project Server integration for enabling real-time simultaneous post-production workflow

Introduction

Infortrend offers a comprehensive shared media storage solution for today's Media and Entertainment industry that processes 4K and above ultra-high resolution media footages with the industry-leading media editing software – DaVinci Resolve, Adobe Premiere, and Final Cut Pro. The EonStor GS (GS) fulfills the need for small workgroups and post-production studios within 10 workstations working collaboratively on a single shared storage. GS is a high availability M&E solution as it supports dual controller with the active-standby configuration allowing to switch to a redundant controller in case of failover of the active one, which eliminates the system downtime for mission-critical projects. Its hardware design features 3U 16-bay, 4U 24-bay and 4U 60-bay form factors, flexible host board options, and stable, reliable modular design with high expandability for adding more capacity and connectivity ports.

Effortless Management with Proprietary Tools

EonOne - EonOne is a web-based storage management tool that complements well with EonStor GS. Infortrend offers two kinds of user privileges for different management purposes. The first one is for M&E User Administrator, who is in charge of users' accounts and storage quota management. To help the administrator easily set up storage and network, EonOne also offers a setup wizard, which will guide users to finish system deployment in 5 minutes and initial environment set up in 30 minutes. Another user privilege is for System Administrator who can do advanced storage configurations, as well as data services settings, and maintenance.

EonView - EonView is a client-based utility for Windows and macOS workstations. Once connected to GS, the workstations installed with EonView are able to automatically detect the GS within the network, the assigned shared folders for each editor will be automatically mounted. This step simplifies the complexities of storage system deployment and network settings, and, therefore, allows users to focus on video editing and creation. If any critical events occur, event notifications are sent to all EonView clients so that the problem can be fixed in time to ensure uninterrupted workflow.

DaVinci Resolve Project Server Integration - DaVinci Resolve Project Server is preinstalled on GS for real-time collaborative video editing with projects synchronization across multiple clients. With centralized project server management, members of creative group can smoothly edit and manage media content from a shared storage with RAID protection without worrying about failures or power outages of the workstations. To ensure data integrity and protect files from accidental deletion, IT administrator can also backup and restore the video files through EonOne management software.

PHYSICAL SPECIFICATIONS

Product Series		GS 2000 T	GS 3000 Gen2	GS 4000 Gen2
Form Factor & Available Model	2U 12-bay	GS 2016 R/S GS 2016 RT/ST	GS 3016 R2CF/S2CF	GS 4016 R2CF/S2CF
	3U 16-bay	GS 2024 R/S GS 2024 RT/ST	GS 3024 R2CF/S2CF	GS 4024 R2CF/S2CF
	4U 60-bay	-	GS 3060 R2CLF/G2LF	GS 4060 R2CLF/G2LF
		Note: T : High performance G : Non upgradable single controller S : Upgradable single controller R : Redundant controller L : One drawer		
Controller		Redundant or Upgradable single controller	Redundant or Non upgradable single controller or Upgradable single controller	
Cache Backup Techniques		Super Capacitor + Flash module (Only for upgradable single controller and redundant controller models)		
CPU		Intel ® Pentium® 2 or 4 core	Intel ® Xeon® D 4-Core	Intel ® Xeon® D 8-Core
Cache Memory (per system)		Default DDR4 16GB Expandable up to 128GB	Default DDR4 16GB Expandable up to 512GB	
		Note: For M&E solution, it is recommended to use memory at least 64GB per controller		
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 (via expansion enclosure)		896	896	896
Max. SSD Cache Pool		3.2TB	4TB	4TB
Onboard SAS Expansion Ports		2	4	4
Onboard 1GbE Ports		8	0	0
Onboard 10 GbE Ports (SFP+)		0	8	8
Max. Host Board Slots		4	4	4
Max. Expansion Board		2	2	2
		Note: The expansion board can only be installed in the HB2 slot and has 12Gb/s SAS x 2 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.		
Max. 16Gb/s FC Ports		16	16	16
Max. 32Gb/s FC Ports		8	16	16
Max. 1 GbE Ports		24	0	0
Max. 10GbE Ports (RJ-45)		8	8	8
Max. 10GbE Ports (SFP+)		8	16	16
Max. 25GbE Ports (SFP28)		8	8	8
Max. 40GbE Ports (QSFP+)		8	8	8
Max. 12Gb/s SAS Ports		10	12	12
Expansion Enclosure (JBOD)		JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, JB 3060L	JB 3012A, JB 3016A, JB 3025BA, JB 3060L	
Dimensions (without chassis ears/ protrusions) (W x H x D)		3U 16-bay: 449 x 130 x 530 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)		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)	GS 3000/4000: 530W x2 (80 PLUS Bronze) GS 3060L/4060L: 1200W x 2 (80 PLUS Platinum)	
	AC Voltage (with PFC(auto-switching))	100VAC @8A to 240VAC @4A	GS 3000/4000: 100VAC @10A to 240VAC @5A GS 3060L/4060L: 100-127VAC @12.47A, 200-240VAC @7.08A	
	Frequency	50-60 Hz	47-63Hz	
	Note: Power is also supplied in redundant mode, allowing full operation with half the resources.			
Safety Standard		• 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 (vsftp 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 • SNMP traps 	
Applications	<ul style="list-style-type: none"> • File explorer • Proxy server • Syslog server • VPN server • 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(optional)	Accelerating data access for random read-intensive environments, such as OLTP		
	Supports up to four SSDs per controller		
	Recommended DIMM capacity per controller for SSD Cache pool for GS 2000		
	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	
	Recommended DIMM capacity per controller for SSD Cache pool for GS 3000/4000 Gen2		
	DRAM:8GB	Max SSD Cache Pool Size: 500GB	
	DRAM:16GB	Max SSD Cache Pool Size: 1,000GB	
	DRAM:32GB	Max SSD Cache Pool Size: 2,000GB	
	DRAM:64GB and up	Max SSD Cache Pool Size: 4,000GB	

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
	Product Services	Register products, download firmware, apply for licensing services, create product repair tickets, or check product repair status

Thailand : E-Rong Consultants Co.,Ltd. | Tel : 02-664-6588 | E-mail : sales@e-rong.co.th

www.e-rong.co.th
E-mail : sales@e-rong.co.th
Line official ID:@e-rongconsultants



ERONG
E-Rong Consultants Co., Ltd.
THINK OF TECHNOLOGY THINK OF E-RONG



EonStor GS U.2 NVMe storage

Enterprise-Class Unified Storage
Integrating SAN, NAS, and Cloud



Highlight

Extreme Performance

- Up to 1000K end-to-end IOPS to accelerate storage operations
- Massive sequential throughput of up to 20GB/s read and 10GB/s write

Flexible Scalability

- Scale-out and scale-up expansion to easily expand performance and capacity to more than 40PB

Easier to Use and Manage

- Provides single namespace for easier access and auto-balancing to reduce the burden of IT storage management

Maximized Storage Efficiency

- U.2 NVMe SSDs for high-performance IO and NL-SAS/ SATA HDDs for massive data archive with automated storage tiering

Optimized for U.2 NVMe SSD

- Built-in intelligent algorithm to increase SSD lifespan and prevent simultaneous failure of multiple SSDs and consequent the data loss

Introduction

EonStor GS U.2 NVMe storage is a high performance storage solution for enterprises. Equipped with U.2 NVMe SSD, it provides higher IOPS and throughput and is more cost-effective. GS U.2 is a unified storage that supports both SAN and NAS services. With block-level and file-level scale-out support, it can linearly increase performance and capacity. Complete data protection allows IT staff to focus on higher value projects. It is a perfect fit for such applications as HPC, M&E, virtualization, and database.

High Performance with U.2 NVMe SSD

With U.2 NVMe SSD's high speed and low latency PCIe Interface, GS U.2 NVMe storage provides up to 20/10 GB/s read/write performance and 1000K IOPS within a single appliance.

Flexible Scalability with Scale-out and Scale-up

EonStor GS can create storage clusters through the scale-out horizontal expansion function, linearly expand performance and storage capacity. You can easily manage data as GS provides the scale-out architecture for both SAN and NAS. Through scale-out expansion, cluster performance can linearly increase as you add more appliances. As for capacity expansion, EonStor GS U.2 NVMe storage supports both scale-out and scale-up with more than 3000 drives.



Easy Data Access for Users and Simple IT Management

Users can access shared folders in a single root directory under a single namespace, so that they don't need to worry about where the data is placed. Auto-balancing is also supported to achieve the benefit of load balancing without the burden of manual IT planning and configuration.

Higher Storage Efficiency with Lower TCO

EonStor GS U.2 NVMe storage supports hybrid storage. And with the automated storage tiering function, EonStor GS U.2 NVMe storage can automatically leverage the high throughput and low latency feature of U.2 NVMe SSDs to deliver faster performance for frequently accessed data, while making better use of HDDs in the expansion enclosure as data backup media, thereby boosting system performance and reducing the cost of ownership.

Intelligent Management of SSD Drives

EonStor GS U.2 NVMe storage has an intelligent algorithm that arranges data to be written in the storage appliance. The algorithm not only reduces the total amount of writes on an SSD to prolong its lifespan but also prevents multiple SSDs from failing at the time and causing data loss. In addition, as EonStor GS U.2 NVMe storage monitors SSD status in real time, it can estimate its remaining lifespan and sends a notification to remind the administrator to replace the SSD which is about to fail.

Complete Data Protection and Backup

EonStor GS U.2 NVMe storage offers multiple data protection features to guarantee that data is tightly protected. For solid-state drive, EonStor GS U.2 NVMe storage incorporated Infortrend's unique RAID technology which helps the system to run normally while ensuring your data is fully protected even when disks get damaged. In terms of local data backup, GS U.2 NVMe storage supports a flexible backup solution – snapshot. User can back up all the resources within the storage system by schedule, including volumes, shared folder, and fulfill rollback to a previous version at any time. As for remote backup, you can use the remote replication feature to back up the files to a remote GS appliance, or even to a public cloud, using EonCloud gateway feature.

High Reliability

From power supplies, fans, controllers, to host boards, the modular design of all these hardware components lowers maintenance complexity and provides fast and precise technical support and RMA services, keeping EonStor GS U.2 NVMe storage safe from any downtime to maintain nonstop services and increase productivity and competitiveness.

Easy Management

With the constant evolution of storage platforms, the GS U.2 NVMe storage adopted EonOne management software to assist customers in improving storage and service efficiency for increased productivity. Its intuitive interface design allows centralized management of cluster and multiple appliances, monitoring of performance and capacity usage, and completion of all related system configurations.

PHYSICAL SPECIFICATIONS

Product Series		GS 2000U		GS 3000U		GS 4000U	
Form Factor & Available Model	2U 24-bay	GS 2024 UR/US		GS 3024 UR/US		-	
	2U 25-bay	-		-		GS 3025 UR/US	
		Note: U : U.2 NVMe storage, S : Upgradable single controller, R : Redundant controller, T : High performance					
Controller		Redundant or Upgradable single controller					
Cache Backup Technology (Optional / not default included on Single Controller models)		Super capacitor+Flash module (Only for upgradable single controller and redundant controller models)					
CPU		Intel® Xeon® D 2-Core		Intel® Xeon® D 4-Core		Intel® Xeon® D 4-Core	
Cache Memory (Per controller)		Default DDR4 8GB Expandable up to 64GB		Default DDR4 8GB Expandable up to 64GB		Default DDR4 8GB Expandable up to 256GB	
Supported Drives		GS 2000U/3000U/4000U: 2.5" U.2 NVMe SSD JBOD: 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 7200 RPM HDD					
		Note: For the latest compatibility details, refer to our official website for the latest Compatibility Matrix.					
Max. Drives Number	via expansion enclosure, per appliance	896					
	via scale-out with other series of appliances, per cluster	3584					
Onboard 12Gb/s SAS Ports (For JBOD Expansion)	Single controller	1	1	2	2		
	Redundant controller	2	2	4	4		
Onboard 10GbE Ports (SFP+)	Single controller	0	2	4	4		
	Redundant controller	0	4	8	8		
Max. Host Board Slots	Single controller	2					
	Redundant controller	4					
Max. Expansion Board	Single controller	1					
	Redundant controller	2					
		Note: The expansion board can only be installed in the HB2 slot and has 12Gb/s SAS x 2 ports only connectable with expansion enclosures.					
Host Board Options		16Gb/s FC x 4 32Gb/s FC x 2/ 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. For redundant controller models, identical host boards must be installed in the same order on both controllers. 2. FC connectivity supports DAS (Direct-Attached-Storage) connection via FC HBA cards and switched fabric connection.					
Max. 16Gb/s FC Ports	Single controller	8					
	Redundant controller	16					
Max. 32Gb/s FC Ports	Single controller	8					
	Redundant controller	16					
Max. 10GbE Ports (RJ-45)	Single controller	4					
	Redundant controller	8					
Max. 10GbE Ports (SFP+)	Single controller	4	6	8			
	Redundant controller	8	12	16			
Max. 25GbE Ports (SFP28)	Single controller	4					
	Redundant controller	8					
Max. 40GbE Ports (QSFP+)	Single controller	4					
	Redundant controller	8					
Max. 12Gb/s SAS Ports	Single controller	4					
	Redundant controller	8					
Expansion Enclosure (JBOD)		JB 3012A, JB 3016A, JB 3024BA, JB 3025BA, JB 3060L					
Dimensions (without chassis ears / protrusions) (W x H x D)		449 x 88 x 500 mm				449 x 88 x 589.6 mm	
Package Dimensions (W x H x D)		780 x 338 x 588 mm				794 x 369 x 596 mm	
Power Supply Unit	Power Supplies	Redundant (1 + 1) hot-swappable 530W x 2 (80 PLUS Bronze)				Redundant (1 + 1) hot-swappable 800W x 2 (80 PLUS Platinum)	
	AC voltage	100VAC @ 10A to 240VAC @ 5A				100-127VAC @ 10A to 200-240VAC @ 5A	
	Frequency	50-60 Hz				47-63 Hz	
Safety Standard		• Electromagnetic Compatibility : CE, BSMI, FCC • Safety : UL/cUL, BSMI, CB					

SOFTWARE SPECIFICATIONS

Max. Logical Drives Number		32
Max. Logical Drives Capacity		512TB
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 5/5F, RAID 6/6F, 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 (vsftp 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"> • Web-based EonOne management software • User account management • Group management • Folder management - folder access control • Quota management • Folder encryption with AES • Integration with Microsoft Active Directory (AD) and Linux LDAP • 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	<ul style="list-style-type: none"> • Email • SNMP traps 	
Applications	<ul style="list-style-type: none"> • File explorer • Proxy server • Syslog server • VPN server • LDAP server • 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, Red 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	Default	Unique factory encryption secures data plus makes deletion simple and complete	
Thin Provisioning	Default	"Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space	
Local Replication (Block level)	Snapshot	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 (Block level)	Block-level		Replication pairs per source volume: 8 Replication pairs per system: 64
		Optional	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. 4x 16Gb FC and 2/4x 32Gb FC host boards do not support Remote Replication
	File-level	Default	Support Rsync with 128-bit SSH encryption
Automated Storage Tiering	Optional		2 or 4 storage tiers based on drive types
			Automated data migration with scheduling options

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	

Thailand : E-Rong Consultants Co.,Ltd. | Tel : 02-664-6588 | E-mail : sales@e-rong.co.th

www.e-rong.co.th
E-mail : sales@e-rong.co.th
Line official ID:@e-rongconsultants



E-RONG
E-Rong Consultants Co., Ltd.
THINK OF TECHNOLOGY THINK OF E-RONG