EonStor GSc Family

Hybrid Cloud Storage Appliance Designed to Streamline Enterprise Cloud Deployment and Access

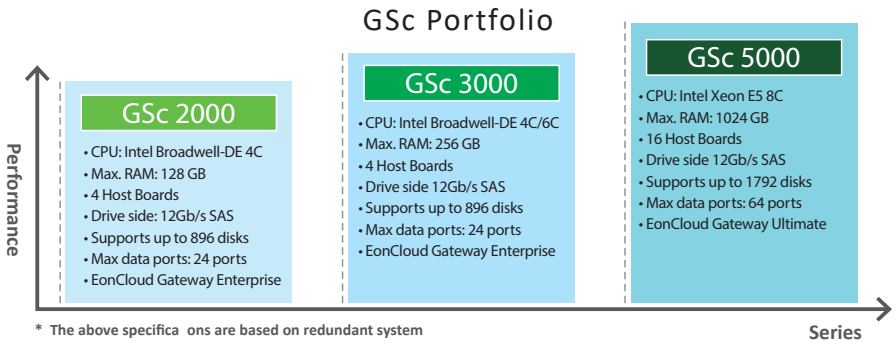
Hightlight

- Easy cloud integration with the existing IT environment and applica ons with general file or block-level as well as the local and cloud data through the common protocols. (e.g. NFS/CIFS/FTP/Rsync/iSCSI)
- Enable faster cloud data access by designatethe local storage to act as cloud cache.
- Flexible cache policy with more than 9 typesof intelligent cache policies and extensive parameter set ngs.
- Cost-savings on cloud service and bandwidth with built-in data compression and deduplica- on features.
- Scalable big data support with up to 2PB of cloud storage space and hundreds million files in the cloud.
- Secure and protect enterprise data with AES 256-bit data encryption and ensures no public cloud data can be decrypted by anyone else. All transmissions to and from the cloud are SSL/TLS encrypted.
- Simple-to-use and web-based cloud mana- gement interface can be operated by any IT staff with a general browser, reducing the management complexity.
- Powerful local storage with excellent block/ file level performance and can deliver up to 700K IOPS, 23,000MB/s block and 17,000MB/s CIFS bandwidth.

Introduction

Today companies across industries and verticals are getting on the cloud. Infortrend introduced all new EonStor GSc family of hybrid cloud storage appliance designed for businesses to streamline cloud deployment by moving and managing data between local and cloud in a transparent manner. GSc offers differentiated features in cloud cache, cloud backup, and cloud tiering.

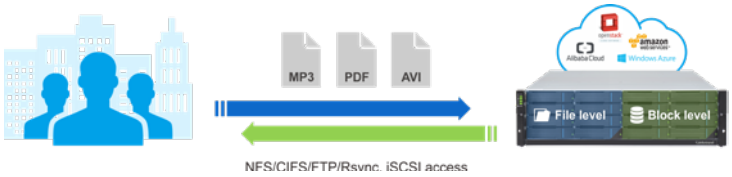
GSc family inherited company's GS line of superior unified storage performance and available in 3 series. EonStor GSc 2000 / 3000 series are cost-effective solutions to meet the cloud storage needs from SMBs to large enterprises. EonStor GSc 5000 series is the high performance cloud storage system designed for modern data centers.



Integrated with cloud storage gateway func ons, GSc simplifies cloud setup by maintaining compa bility with exis ng IT environment and offers cloud data access to both file and block-level using common protocols, thus greatly reduced the difficulty to reconfigure.

In addi on, GSc allows enterprise with data already on the cloud to speed-up cloud access by designa ng the local storage as cache. With advanced cache feature, IT managers can further op mize cache performance with 9 types of intelligent cache policies with extensive parameter set ngs. Cloud backup feature also enables local data to take periodic snapshots to the cloud for remote backup. Cloud ering feature places the frequently accessed hot data in the local while less-frequently accessed cold data to the cloud.

Data security has always been the top concern for enterprises to get on the cloud. GSc supports AES 256-bit data encryp on and ensures no public cloud data can be decrypted by anyone else. Furthermore, all transmissions to and from the cloud are SSL encrypted to ensure addi onal data security. Built-in data compression and deduplica on features can effec vely reduce the amount of cloud data space used, resul ng in cost-savings. Ini ally, GSc offers connec vity to Amazon S3, Microso Azure, Openstack Swi , and Alibaba Cloud.



PHYSICAL SPECIFICATIONS

Product Series		GSc 2000	GSc 3000 Gen1	GSc 5100	GSc 5200
Form Factor	2U 12-bay	GSc 2012**R/S** GSc 2012**RT/ST**	GSc 3012**R/S** GSc 3012**RT/ST**	-	-
	2U 24-bay	GSc 2024**RB/SB** GSc 2024**RTB/STB**	GSc 3024**RB/SB**	-	-
	2U 25-bay	-	GSc 3025**RB/SB** GSc 3025**RTB/STB**	-	-
	3U 16-bay	GSc 2016**R/S** GSc 2016**RT/ST**	GSc 3016**R/S** GSc 3016**RT/ST**	-	-
	4U 24-bay	GSc 2024**R/S** GSc 2024**RT/ST**	GSc 3024**R/S** GSc 3024**RT/ST**	-	-
	4U 60-bay	-	GSc 3060**RL/GL** GSc 3060**RTL/GTL**	-	-
	4U	-	-	GSc 5100**R**	GSc 5200**R**
		Note:(1) **T**: High performance **G**: Single controller **S**: Single controller(upgradable to dual controller) **R**: Redundant controller **C**: Super capacitor **L**: One drawer; **B**: 2.5" form factor.			
Controller		Single or Dual-redundant or Single upgradable to redundant		Dual-redundant	
Cache Backup Techniques		Super capacitor+Flash module (only for upgradable single controller and dual controller models)		BBU+Flash module	
CPU		Intel® Pentium® 2 or 4 core	Intel® Xeon® D 4 or 6 Core	Intel® Xeon® E5 8 Core	
Cache Memory		Default DDR4 8GB Expandable up to 64GB	Default DDR4 8GB Expandable up to 128GB	Default DDR4 128GB Expandable up to 512GB	Default DDR4 128GB Expandable up to 1024GB
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 (with expansion board)		896		1792	
Max. Onboard SAS Expansion Ports		2	4	8	8
Max.Onboard 1GbE ports		8	4	0	0
Max. Onboard 10GbE ports (RJ-45)		0	4	0	0
Max. Host Board Slots		4	4	4	16
Max. Expansion Board		2	2	4 (Default Included)	4 (Default Included)
		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 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 4 1GbE (RJ-45) x 4 10GbE (RJ-45) 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. For GS 5100/5200 The expansion board can only be installed in slots HB9 and HB10. 4. For GS 5100 the host boards should be installed in HB7~8. For GS 5200, the host boards should be installed in HB1~8. 5. GS 5200 deafult memory: 64GB (32GB for each controller), it is recommended to install 8 host boards.(4 in each controller) To install up to 16 host boards, 128GB is required.(64GB each)			
Max. 16Gb/s FC Ports		16	16	16	64
Max. 32Gb/s FC Ports		8	16	16	64
Max. 1GbE Ports (RJ-45)		24	20	16	64
Max. 10GbE Ports (RJ-45)		8	12	8	32
Max. 10GbE Ports (SFP+)		8	8	8	32
Max. 25GbE Ports (SFP28)		8	8	8	32
Max. 40GbE Ports (QSFP+)		8	8	8	32
Max. 12Gb/s SAS Ports		10	12	16	40
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 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 550 mm 4U 24-bay: 449 x 174.4 x 550 mm 4U 60-bay: 447.6 x 176 x 840.9 mm	449 x 175.3 x 547.7 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	591 x 295 x 800 mm	
Power Supply Unit (with fan module)	Power Supplies (Redundant/hot-swappable)	460W x 2 (80 PLUS Bronze)	GSc 3000/4000: 530W x 2 (80 PLUS Bronze) GSc 3060L: 1200W x 2 (80 PLUS Platinum)	1200W x 2 (80 PLUS Platinum)	
	AC Voltage (with PFC(auto-switching))	100VAC @8A to 240VAC @4A	GSc 3000/4000: 100VAC @10A to 240VAC @5A GSc 3060L: 100-127VAC @12.47A, 200-240VAC @7.08A	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 2.2.2), 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)	• 16 GB memory: 200 • 32 GB memory: 512 • 64 GB memory: 1024 • 128 GB memory: 2048
Management		• 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		• 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		• 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, Ret 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	Warranty extension: Can extended standard service 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.
	Infortrend Technical Support	FAQ, Download Center, Licensing Service, Service Request

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