EonStor GS

EonStor GS Family Enterprise-Class Unified Storage Integrating SAN, NAS and Cloud

## HIGHLIGHTS

#### **UNIFIED STORAGE**

 Consolidate SAN, NAS and cloud in a single system to enjoy powerful storage features and simplify deployment and management

#### EFFICIENCY

- Integrated cloud based storage reduces the cost of deploying applications from the cloud
- EonStor GS family makes efficient use of available bandwidth and greatly speeds up data extend when uploading data to the cloud with its data reduction technology
- With various built-in services including proxy, LDAP, syslog and VPN server to assist enterprises simplify their IT environment deployment.

#### **EXCEPTIONAL COST PERFORMANCE**

- High Block/file level Performance, it delivers up to 700K IOPS, 23,000MB/s block and 17,000MB/s CIFS bandwidth.
- Future-proof expansion solution offers ample data capacity of up to 1792 drives.
- Comprehensive data services, including SSD Cache and automated storage tiering improve performance and speed up data access.
- Support for all-flash and hybrid configurations provides flexibility of choice to meet your needs.
- Select from a wide range of product series and multiple host options.

The volume of digital data currently being produced is growing at unprecedented rates, in big part due to our increasing demand for unstructured data types such as files, images and videos, which push the boundaries of storage capacity and performance. Because of this, many organizations are making cloud storage, with its cost-effective flexibility and infinite scalability, an integral part of their strategy. Now more than ever, choosing a local storage solution that can easily integrate with cloud services is a must.

EonStor GS family is a unified storage solution that incorporates remote cloud storage into local applications to offer the best of both worlds – unlimited cloud storage and high performance local storage – as well as automatic data lifecycle management, to allow SMBs and SMEs running local SAN/NAS applications to easily and cost-effectively integrate and expand their storage architecture into cloud services.

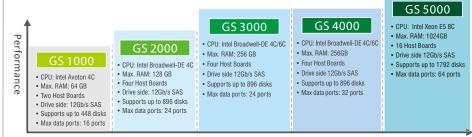
#### Powerful All-around High Performance & Efficiency

Based on much improved hardware and firmware, EonStor GS family can handle file level protocols including CIFS/SMB, NFS, AFP and FTP; block level protocols such as Fiber Channel, iSCSI, SAS and InfiniBand.

By integrating all of these protocols and harnessing the power of Intel's multicore CPU, EonStor GS family delivers not only outstanding flexibility but also incredible performance in two configurations: all-flash and hybrid. As an all-flash system, it delivers up to 700K IOPS, 23,000MB/s block and 17,000MB/s CIFS bandwidth. Moreover, by offering hybrid features such as SSD Cache, protocol translation between local NAS/SAN and cloud storage services, and automated storage tiering, EonStor GS family guarantees exceptional performance at every level of operation.

This great performance and efficiency can also be found in our cloud storage integration thanks to deduplication and compression features, which ensure the efficient use of bandwidth to effectively extend data to the cloud and lower overall costs.

#### **GS** Portfolio



\* The above specifications are based on redundant system

Series

**O**Infortrend

\* All design and specification declared are subject to change without notice in advance. All rights reserved. Please refer to Infortrend website for further information or localization updates.

#### **CLOUD READY**

- The EonStor GS can integrate with cloud storage, and data can be optimally allocated between EonStor GS and Cloud through our smart algorithms, so users can enjoy the best performance and the safest storage.
- EonStor GS offers comprehensive cloud integration functions for users to choose from: Cloud Tiering, Cloud Cache and Cloud Backup.
- Support for private and public cloud services enables users to choose the option that best suits their budget or data security requirements

#### AVAILABILITY & RELIABILITY

- SMB 3.0 failover and multipathing support.
- Dual controllers and non-single-point-offailure hardware design ensure system continuity in case of faults.
- Cache protection with Super capacitor and Flash to ensure data safety
- IDR support ensures all hard drives are healthy to prevent from rebuild

#### **DATA PROTECTION & SECURITY**

• Whether inactive or mid transfer, data is always encrypted to ensure full protection from malicious attacks

#### SIMPLICITY

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

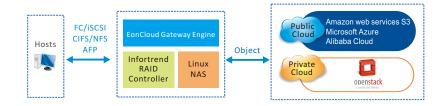
#### SYMMETRIC ACTIVE-ACTIVE CONTROLLERS

- Symmetric active-active controllers
- Automatically reconnected I/O during path failure

#### **Infinite Storage Capacity on Cloud**

One of the key benefits of cloud storage solutions is their unlimited scalability and flexible "scale on demand" model, which allows you to expand your storage capacity as needed, without upfront investment, to fit your capacity requirements as they evolve.

By integrating Intelligent EonCloud Gateway Engine and supporting a wide range of both private cloud and public cloud services, including Amazon, Azure, and the EonStor GS 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.



#### **Comprehensive Data Protection and Security**

As security is of utmost importance when it comes to data storage in the cloud, the EonStor GS family provides AES 256bit Encryption for data-in-flight and data-at-rest, as well as self-encrypting drives (SED) compatibility, ensuring data is always protected from malicious threats. Furthermore, with integrated SSL, links between server and client are also encrypted.

Security threats are by no means the only concern when it comes to safeguarding data. Unexpected disk failures, natural disasters and power outages all up the risk of data loss. EonStor GS family ensures this risk is minimal with its integrated backup functions such as Intelligent Drive Recovery (IDR), snapshot, local replication, remote replication and file-level rsync.

The system supports built-in SMB 3.0 failover and multipathing to handle failures. Also, designed with redundant dual controllers and non-single-point-of-failure hardware components, it ensures business continuity at all times.

#### Symmetric active-active controllers

EonStor GS supports symmetric active-active controller configuration to minimize administrative effort and boost operation efficiency. Hosts can access the same LUNs simultaneously via both controllers. I/O are more equally distributed across both controllers and all paths, effectively minimizing costly path management time. In the event of a path failure, I/O can automatically continue through the remaining paths with little or no failover.

| PHYSICAL SPECIFICATIO  | DNS  |  | EonStor GS Family  |   |  |
|--|--|--|--|---|--|
| Specifications (per system)                                      | GS 1000Gen2  | GS 2000<br>GS 2000T <sup>*1</sup>                                      | GS 3000<br>GS 3000T <sup>*1</sup>                                      | GS 4000<br>GS 4000T <sup>*1</sup>   |  |
| 2U 12-bay  | V  | V  | V  |   |  |
| 2U 24-bay  | V  | V  | V (T model unavailable   | e) V  |  |
| 2U 25-bay<br>Form factor 3U 16-bay                               | V  | V  | V V  | ٧   |  |
| 4U 24-bay  | V  | V  | V  | v   |  |
| 40 24-bay<br>40 60-bay   | v  | v  | V  |   |  |
| Controller   |  | Dual-redundant/ Single   | upgradable to redundant  |   |  |
| Vax drives   | 448  | 896 (with expansion board)   | 896 (with expansion board)   | 896 (with expansion board)  |  |
| Max Grives<br>Max SSD cache pool                                 | 1TB  | 3.2TB  | 3.2TB  | 3.2TB   |  |
| Cache backup techniques  | IID  |  | r + Flash module   | 3.210   |  |
| Power supplies   | Redundant / hot-swappab  | le: 460W x 2 (80 PLUS Bronze)  |  | wappable: 530W x 2 (80 PLUS Bronze)<br>able: 1200W x 2 (80 PLUS Platinum) |  |
| Power supply unit AC voltage                                     | 100VAC @ 84  | A to 240VAC @ 4A   | (GS 3000/4000) 100VAC @ 1  | IOA to 240VAC @ 5A  |  |
| (with PFC (auto-switching))                                      |  |  |  | 12.47A, 200-240VAC @ 7.08A  |  |
| Frequency  |  | -60 Hz   |  | 63 Hz   |  |
|  |  | ant mode, allowing full operation with half the                        |  |   |  |
| CPU  | 2x Intel Avoton (Atom)<br>4 Core   | 2x Intel Broadwell-DE (Pentium)<br>GS 2000/GS 2000T: 2 Core/4 Core     | 2x Intel Broadwell-DE (Xeon)<br>GS 3000/GS 3000T: 4 Core/6 Core        | 2x Intel Broadwell-DE (Xeon)<br>GS 4000/GS4000T: 4 Core/6 Core            |  |
|  | Default DDR3 16GB  | Default DDR4 16GB  | Default DDR4 16GB  | Default DDR4 16GB   |  |
| Cache memory   | Up to 32GB   | Up to 32/64/ 128(GB)   | Up to 32/64/128/256(GB)  | Up to 32/64/128/ 256(GB)  |  |
| Max. number of host board  | 2  | 4  | 4  | 4   |  |
| Onboard SAS expansion ports                                      | 2 x 12Gb/s SAS wide ports  | 2 x 12Gb/s SAS wide ports  | 4 x 12Gb/s SAS wide ports  | 4 x 12Gb/s SAS wide ports   |  |
|  | 0  | 2  | 2  | 2   |  |
| Expansion board  |  | e installed in the HB2 slot and has 2 x 12Gb/s                         |  |   |  |
|  | 0  |  |  | 16  |  |
| Onboard converged ports  | -  | t supports 4-Port 8 Gb/s FC , 2-port 16Gb/s                            |  |   |  |
| Onboard iSCSI ports (10Gb RJ-45)                                 | 0  | 0  | 4  | 0   |  |
| Onboard iSCSI ports (1Gb RJ-45)                                  | 8  | 8  | 4  | 0   |  |
| 010001 0001 ports (100 110-40)                                   | 4 x 16Gb/s FC ports  |  | 4 x 16Gb/s FC ports  |   |  |
|  | (No Remote Replication support)  | 4 x 16Gb/s FC ports<br>(No Remote Replication support)                 | (No Remote Replication support)  | 4 x 16Gb/s FC ports<br>(No Remote Replication support)                    |  |
|  | 4 x 1Gb/s iSCSI ports<br>2 x 10Gb/s iSCSI ports (SFP+)   | 4 x 1Gb/s iSCSI ports<br>2 x 10Gb/s iSCSI ports (SFP+)                 | 4 x 1Gb/s iSCSI ports<br>2 x 10Gb/s iSCSI ports (SFP+)                 | 4 x 1Gb/s iSCSI ports<br>2 x 10Gb/s iSCSI ports (SFP+)                    |  |
|  | 2 x 10Gb/s iSCSI ports (SFF + )<br>2 x 10Gb/s iSCSI ports (RJ-45)  | 2 x 10Gb/s iSCSI ports (RJ-45)   | 2 x 10Gb/s iSCSI ports (RJ-45)   | 2 x 10Gb/s iSCSI ports (RJ-45)  |  |
|  | 2 x 40Gb/s iSCSI ports (QSFP)  | 2 x 25Gb/s iSCSI ports (SFP28)   | 2 x 25Gb/s iSCSI ports (SFP28)   | 2 x 25Gb/s iSCSI ports (SFP28)  |  |
|  | 2 x 12Gb/s SAS ports   | 2 x 40Gb/s iSCSI ports (QSFP)  | 2 x 40Gb/s iSCSI ports (QSFP)  | 2 x 40Gb/s iSCSI ports (QSFP)   |  |
| lost board ports   | Converged host board:  | 2 x 56Gb/s InfiniBand ports<br>(for Linux only, block level only)      | 2 x 56Gb/s InfiniBand ports<br>(for Linux only, block level only)      | 2 x 56Gb/s InfiniBand ports<br>(for Linux only, block level only)         |  |
|  | - 4 x 8Gb/s FC ports   | 2 x 12Gb/s SAS ports   | 2 x 12Gb/s SAS ports   | 2 x 12Gb/s SAS ports  |  |
|  | - 2 x 16Gb/s FC ports<br>- 4 x 10Gb/s iSCSI ports (SFP+)   | Converged host board:  | Converged host board:  | Converged host board:   |  |
|  | 4 x 1000/313031 poits (311 +)  | - 4 x 8Gb/s FC ports   | - 4 x 8Gb/s FC ports   | - 4 x 8Gb/s FC ports  |  |
|  |  | <ul> <li>2 × 16Gb/s FC ports</li> <li>4 × 10Gb/s FCoE ports</li> </ul> | <ul> <li>2 × 16Gb/s FC ports</li> <li>4 × 10Gb/s FCoE ports</li> </ul> | - 2 × 16Gb/s FC ports<br>- 4 × 10Gb/s FCoE ports                          |  |
|  |  | - 4 x 10Gb/s iSCSI ports (SFP+)  | - 4 x 10Gb/s FCCE ports (SFP+)   | - 4 x 10Gb/s FCCE ports (SFP+)  |  |
|  | Note: 1. The two controllers must have   | identical slot settings. 2. Fibre channel su                           | pports point-to-point and switch mode.                                 |   |  |
| Host board + onboard ports (max.)                                | 16   | 24   | 24   | 32  |  |
| Max. 8Gb/s FC ports  | 8  | 16   | 16   | 32  |  |
| Max. 16Gb/s FC ports   | 8  | 16   | 16   | 24  |  |
| Max. 10 GbE FCoE ports   | 0  | 16   | 16   | 32  |  |
| Max. 1 GbE/iSCSI ports   | 16   | 24   | 20   | 16  |  |
| Max. 10 GbE/iSCSI (SFP+) ports                                   | 8  | 16   | 16   | 32  |  |
| Max. 10 GbE/iSCSI (RJ45) ports                                   | 4  | 8  | 12   | 8   |  |
| ( ):   | 0  | 8  | 8  | 8   |  |
| Max. 25 GbE/iSCSI (SFP28) ports<br>Max. 40GbE/iSCSI (QSFP) ports | 4  | 8  | 8  | 8   |  |
|  | 0  | 8  | 8  | 8   |  |
| Aax. 56Gb/s InfiniBand ports                                     | 4  | 8  | 8  | 8   |  |
| Aax. 12Gb/s SAS ports  | 4  |  |  | ŏ   |  |
| Max. number of logical drives                                    |  |  | 32   |   |  |
| Max. logical drive capacity                                      |  |  | 12TB   |   |  |
| Configurable stripe size   |  |  | B, 512KB, or 1024KB per logical drive                                  |   |  |
| Configurable write policy  |  |  | gical drive. This policy can be modified.                              |   |  |
| Aax. size of pool  |  |  | 2PB  |   |  |
| Aax. number of pools   |  |  | 32   |   |  |
| Max. number of volumes (per pool/ per system)                    |  |  | 024  |   |  |
| Aax. number of LUNs mappable                                     |  |  | 1000   |   |  |
| /lax. volume size  |  |  | 2PB  |   |  |
| Number of tags reserved for each Host-LUN con                    | nection  |  | to 256   |   |  |
| Max iSCSI Initiators (per controller)                            |  |  | 832  |   |  |
| Naximum host connection (per FC)                                 |  |  | 128  |   |  |
| Max. file system size  |  |  | 2PB  |   |  |
| Max. number of user accounts                                     |  |  | 0000   |   |  |
| Max. number of user groups                                       |  |  | 512  |   |  |
| ile Level Max. number of folder sharing                          |  | 2048 (NFS/CIFS   | , , , ,  |   |  |
| Max. number of rsync jobs  |  | 1  | 024  |   |  |
| Max. number of rsync concurrent p                                | rocesses   |  | 64   |   |  |
| Max. number of concurrent connect                                | tions  | • 16 GB memory: 200  | • 64 GB memory: 1024   |   |  |
| (NFS/CIFS/AFP/FTP)   |  | • 32 GB memory: 512  | • 128 GB memory: 2048  |   |  |
| RAID options   |  | RAID 0, 1, (1+0),  | 3, 5, 6, 10, 30, 50, 60  |   |  |
|  |  | Version 2.0/3.0, NFS: Version 2/3/4, AFP,                              | FTP, FXP, WebDAV   |   |  |
| Protocol support   | Block Level Protocol FC, FCoE, iS  | CSI, SAS, InfiniBand   |  |   |  |
|  | Object Level Protocol OpenStack S  |  |  |   |  |
| EonCloud Gateway   |  | cloud providers: Amazon S3, Microsoft /                                | Azure, Alibaba Cloud, OpenStack  |   |  |
|  | 00 DI UO CONTRA DI LA CONTRA DI | more than 90% energy officiancy  |  |   |  |
| ireen design   | 80 PLUS power supplies delivering  |  |  |   |  |
| ìreen design   | <ul> <li>Intelligent multi-level drive spin-dov</li> </ul>   | wn   |  |   |  |
| Green design<br>Regulatory                                       |  | wn   |  |   |  |

## PHYSICAL SPECIFICATIONS

# **EonStor GS Family**

| Specifications (per system)                                 | GS 5100   | GS 5200  |  |  |  |
|---|---|--|--|--|--|
| Form factor   4U  | V   | V  |  |  |  |
| Controller  | Dual-redur  | ndant  |  |  |  |
| Max drives  | 1792  |  |  |  |  |
| Max SSD cache pool  | 3.2TB   |  |  |  |  |
| Cache backup techniques                                     | BBU + Flash i   |  |  |  |  |
| Power supplies  | Redundant/hot-swappable 1200W x 2 (80 PLUS Platinum)  |  |  |  |  |
| AC voltage<br>Power supply unit (with PFC (auto-switching)) | 100-127VAC@12.47A,  | 200-240VAC@7.08A   |  |  |  |
| Frequency   | 47-63   | łz   |  |  |  |
| in oquono y   | Note: Power is also supplied in redundant mode, allowing full operation with half the res   |  |  |  |  |
|   | 2 x Intel Xeon E5   | 4 x Intel Xeon E5  |  |  |  |
| CPU   | 8 core  | 8 core   |  |  |  |
| Cache memory  | Default DDR4 32GB   | Default DDR4 64GB  |  |  |  |
| o dono momor y  | Up to 64GB, 128GB, 256GB or 512GB   | Up to 128GB, 256GB, 512GB or 1024GB  |  |  |  |
| Maria and a strategical design                              | 4   | 16   |  |  |  |
| Max. number of host board                                   | Note: GS 5200 deafult memory: 64GB (32GB for each controller), it is recommended to<br>is required (64GB each).   |  |  |  |  |
| Expansion board   | 4 (Default included)  | 4 (Default included)   |  |  |  |
| Expansion board   | Note: The expansion board can only be installed in slots HB9 and HB10.<br>4 x 16Gb/s FC port<br>(No Remote Replic   |  |  |  |  |
| Host board ports  | 4 x 16b/s iSCSI p<br>2 x 10Gb/s iSCSI p<br>2 x 40Gb/s iSCSI p<br>2 x 56Gb/s InfiniBr<br>(for Linux only, bit<br>2 x 12Gb/s SAS po<br>Converged host boar<br>- 4 x 86b/s FC port<br>- 2 x 16Gb/s FC0 Ep<br>- 4 x 10Gb/s iSCSI p<br>Note: 1. The two controllers must have identical slot settings. | orts (RJ-45)<br>orts (QSFP)<br>and ports<br>bock level only)<br>rts<br>d:<br>s<br>s<br>orts<br>orts<br>orts (SFP+) |  |  |  |
| M. 001 ( 50   | <ol> <li>For GS 5100, the host boards should be installed in HB7~8. For GS 5200, the</li> <li>Fibre Channel supports point-to-point and switch mode.</li> </ol>   |  |  |  |  |
| Max. 8Gb/s FC ports<br>Max. 16Gb/s FC ports                 | <u> </u>  | 64 64  |  |  |  |
| Max. 10 GbE FCoE ports                                      | 16  | 64   |  |  |  |
| Max. 1 GbE/iSCSI ports                                      | 16  | 64   |  |  |  |
| Max. 10 GbE/iSCSI (SFP+) ports                              | 16  | 64   |  |  |  |
| Max. 10 GbE/iSCSI (RJ-45) ports                             | 8   | 32   |  |  |  |
| Max. 40GbE/iSCSI (QSFP) ports                               | 8   | 32   |  |  |  |
| Max. 56Gb/s InfiniBand ports                                | 8   | 32   |  |  |  |
| Max. 12Gb/s SAS ports (for expansion enclosures)            | 8   |  |  |  |  |
| Max. number of logical drives                               | 32  |  |  |  |  |
| Max. logical drive capacity                                 | 512T  | В  |  |  |  |
| Configurable stripe size                                    |   |  |  |  |  |
| Configurable write policy                                   | 16KB, 32KB, 64KB, 128KB, 256KB, 512KB, or 1024KB per logical drive<br>Write-Back or Write-Through per logical drive. This policy can be modified.   |  |  |  |  |
| Max. size of pool   |   |  |  |  |  |
| Max. number of pools  | 32  |  |  |  |  |
| Max. number of volumes (per pool/ per system)               | 1024  | 1  |  |  |  |
| Max. number of LUNs mappable                                | 4000  |  |  |  |  |
| Max. volume size  | 2PB   |  |  |  |  |
| Number of tags reserved for each Host-LUN                   |   |  |  |  |  |
| connection  | Up to 2   | JU   |  |  |  |
| Max iSCSI Initiators (per controller)                       | 832   |  |  |  |  |
| Maximum host connection (per FC)                            | 128   |  |  |  |  |
| Max. file system size                                       | 2PB   |  |  |  |  |
| Max. number of user accounts                                | 2000  |  |  |  |  |
| Max. number of user groups                                  | 512   |  |  |  |  |
| File Level Max. number of folder sharing                    | 2048 (NFS/CIFS/FT   |  |  |  |  |
| Max. number of rsync jobs                                   | 1024  | 1  |  |  |  |
| Max. number of rsync concurrent pr                          |   |  |  |  |  |
| Max. number of concurrent connect                           |   | • 64 GB memory: 1024<br>• 128 GB memory: 2048  |  |  |  |
| controller (NFS/CIFS/AFP/FTP)                               | • 32 GB memory: 512   | • 128 GB memory: 2048  |  |  |  |
| RAID options Protocol support                               | RAID 0, 1, (1+0), 3, 5,<br>File Level Protocol CIFS/ SMB: Version 2.0/3.0, NFS: Version 2/3/4, AFP, FTP<br>Block Level Protocol OpenStack Swift<br>OpenStack Swift  |  |  |  |  |
| FonCloud Gateway  | Support the integration with following cloud providers: Amazon S3, Microsoft Azu  | re Alibaba Cloud, OpenStack  |  |  |  |
| EonCloud Gateway  | Support the integration with following cloud providers: Amazon S3, Microsoft Azu     80 PLUS power supplies delivering more than 80% energy efficiency  | יט, הוושמשמ טוטנונו, טובווטנמטא  |  |  |  |
| Green design  | <ul> <li>80 PLOS power supplies delivering more than 80% energy enciency</li> <li>Intelligent multi-level drive spin-down</li> </ul>  |  |  |  |  |
| Des Julies  | Electromagnetic Compatibility : CE, BSMI, FCC, KC   |  |  |  |  |
| Regulatory  | • Safety : UL, BSMI, CB, EAC  |  |  |  |  |

| YSICAL SPECIFICATI                  |   | EonStor GS Family   |   |  |  |
|-------------------------------------|---|---|---|--|--|
|                                     | GS 100  | 0 Gen2 Series   |   |  |  |
| Form Factor                         | 2U 12-bay   | 3U 16-bay   | 4U 24-bay   | 2U 24-bay  |  |
| Available Models                    | GS 1012R2CF/S2CF Note: S: Single controller(upgradable to dual cont   | GS 1016R2CF/S2CF<br>troller) R: Redundant controller  | GS 1024R2CF/S2CF<br>2: Gen2 C: Super capacitor L: On  | GS 1024R2CBF/S2CBF<br>e Drawer (for GS 3060)   |  |
| Supported drives                    | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.5" 10,000 RPM SAS HDD</li> <li>2.5" 15,000 RPM SAS HDD</li> <li>3.5" 7,200 RPM Nearline SAS HDD</li> <li>3.5" 7,200 RPM SATA HDD</li> </ul>   | • 2.5" SAS SSDs<br>• 2.5" SATA SSDs<br>• 2.5" 10,000 RPM SAS HDD<br>• 2.5" 15,000 RPM SAS HDD<br>• 3.5" 7,200 RPM Nearline SA<br>• 3.5" 7,200 RPM SATA HDD  | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.5" 10,000 RPM SAS H</li> <li>2.5" 15,000 RPM SAS H</li> </ul> | • 2.5" SAS SSDs<br>• 2.5" SATA SSDs<br>• 2.5" SATA SSDs<br>• 2.5" 10,000 RPM SAS HD<br>DD<br>• 2.5" 15,000 RPM SAS HD<br>• SAS HDD   |  |
|                                     | Note: For the latest compatibility details, refer to o  |   |   |  |  |
| Max. drives number<br>Rack Support  | 448<br>2U. 19-inch rackmount  | 448<br>3U, 19-inch rackmount  | 448<br>4U, 19-inch rackmount  | 448<br>2U, 19-inch rackmount   |  |
| Dimensions                          |   |   |   |  |  |
| (Without chassis ears/ protrusions) | 447(W)x88(H)x500mm(D) 44  | 17(W)x130(H)x500mm (D)  | 447(W)x175(H)x500mm (D)   | 447(W)x88(H)x500mm (D)   |  |
| Package Dimensions                  | 780(W)x379(H)x588mm (D) 78  | 30(W)x423(H)x588mm (D)  | 780(W)x465(H)x588mm (D)   | 780(W)x338(H)x588mm (D)  |  |
| Expansion enclosure (JBOD)          |   | JB 3012A<br>JB 3016A<br>JB 3024BA   | JB 3025BA<br>JB 3060<br>JB 3060L  |  |  |
|                                     | GS 2000(T)/30   | 000(T)/4000(T) S  |   |  |  |
| Form Factor                         | 2U 12-bay   | 30 16   |   | 4U 24-bay  |  |
| Available Models                    | GS 3012RCF/SCF<br>GS 3012RTCF/STCF<br>GS 2012RCF/SCF<br>GS 2012RCF/STCF   | GS 4016R<br>GS 4016R<br>GS 3016R<br>GS 3016R<br>GS 2016R<br>GS 2016R  | TCF/STCF<br>CF/SCF<br>TCF/STCF<br>CF/SCF  | GS 3024RCF/SCF<br>GS 3024RTCF/STCF<br>GS 2024RCF/SCF<br>GS 2024RCF/STCF  |  |
|                                     | Note: G: Single controller S: Single controller(u   |   |   | ance <b>C</b> : Super capacitor  |  |
| Supported drives                    | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.6" 10,000 RPM SAS HDD</li> <li>2.5" 15,000 RPM SAS HDD</li> <li>3.5" 7,200 RPM Nearline SAS</li> <li>3.5" 7,200 RPM SATA HDD</li> </ul>   | 2.5" SATA SSDs         • 2.5" SATA SSDs           2.5" 10,000 RPM SAS HDD         • 2.5" 10,000 RPM SAS HDD           2.5" 15,000 RPM SAS HDD         • 2.5" 15,000 RPM SAS HDD           3.5" 7,200 RPM Nearline SAS HDD         • 3.5" 7,200 RPM Nearline SAS HDD |   | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.5" 10,000 RPM SAS HDD</li> <li>2.5" 15,000 RPM SAS HDD</li> <li>3.5" 7,200 RPM Nearline SAS HI</li> <li>3.5" 7,200 RPM SATA HDD</li> </ul> |  |
|                                     | Note: For the latest compatibility details, refer to c  |   |   |  |  |
| Max. drives number                  | 896 896 2U, 19-inch rackmount 3U, 19-inch rack  |   |   | 896  |  |
| Rack Support<br>Dimensions          | 2U, 19-inch rackmount   |   |   | 4U, 19-inch rackmount  |  |
| (Without chassis ears/ protrusions) | 447 (W)x88(H)x500(D)mm  | 447(W)x130(H  | I)X500(D)mm   | 447(W)x175(H)x500(D)mm   |  |
| Package Dimensions                  | 780(W)x379(H)x588(D)mm  | 780(W)x423(H  | , ,,  | 780(W)x465(H)x588(D)mm   |  |
| Expansion enclosure(JBOD)           |   | JB 3012A<br>JB 3016A<br>JB 3024BA   | JB 3025BA<br>JB 3060<br>JB 3060L  |  |  |
| Form Factor                         | 4U 60-bay   | 2U 24   | -bay  | 2U 25-bay  |  |
| Available Models                    | GS 3060RCLF<br>GS 3060GLF<br>GS 3060RTCLF<br>GS 3060GTLF  | GS 4024RCI<br>GS 4024RT(<br>GS 3024RC)<br>GS 2024RCI<br>GS 2024RT(  | CBF/STCBF<br>BF/SCBF<br>BF/SCBF   | GS 3025RCBF/SCBF<br>GS 3025RTCBF/STCBF   |  |
|                                     | Note: G: Single controller S: Single controller(u<br>L: One Drawer (for GS 3060)  | pgradable to dual controller) <b>R</b> : F  | Redundant controller T: High Perform  | nance <b>C</b> : Super capacitor   |  |
| Supported drives                    | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.5" 10,000 RPM SAS HDD</li> <li>2.5" 15,000 RPM SAS HDD</li> <li>3.5" 7,200 RPM Nearline S</li> <li>3.5" 7,200 RPM SATA HDD</li> <li>Note: 1. 2U 24-bay and 2U 25-bay support 3.5" dr</li> </ul> | • 2.5" 15,00<br>AS HDD • 3.5" 7,200<br>• 3.5" 7,200   |   | <ul> <li>2.5" SAS SSDs</li> <li>2.5" SATA SSDs</li> <li>2.5" 10,000 RPM SAS HDD</li> <li>2.5" 15,000 RPM SAS HDD</li> <li>3.5" 7,200 RPM Nearline SAS HD</li> <li>3.5" 7,200 RPM SATA HDD</li> </ul> |  |
|                                     | 2. For the latest compatibility details, refer to   |   | onStor GS Compatibility Matrix.   |  |  |
| Max. drives number                  | 896<br>4U, 19-inch rackmount  | 89<br>2U, 19-inch   |   | 896<br>2U, 19-inch rackmount   |  |
| Rack Support<br>Dimensions          |   |   |   |  |  |
| (Without chassis ears/ protrusions) | 448(W)x176(H)x840(D)mm  | 447(W)x88(H   |   | 447(W)x88(H)x500(D)mm  |  |
| Package Dimensions                  | 620(W)x460(H)x1140(D)mm   | 780(W)x338(F<br>JB 3012A  | JB 3025BA   | 780(W)x340(H)x588(D)mm   |  |
| Expansion enclosure(JBOD)           |   | JB 3016A<br>JB 3024BA   | JB 3060<br>JB 3060L   |  |  |
|                                     | GS 5  | 5000 Series   |   |  |  |
| Form Factor                         | GS 5100RL   | <b>4U</b> (No internal bay. Expansi   |   | S 5200RL   |  |
| Available Models                    | Note: R: Redundant controller L: BBU (for GS 5  | 000)  |   |  |  |
| Supported drives                    | • 2.5" SAS SSDs<br>• 2.5" SATA SSDs<br>• 2.5" SATA SSDs<br>• 2.5" 10,000 RPM SAS HDD<br>• 2.5" 15,000 RPM SAS HDD<br>• 3.5" 7,200 RPM Nearline SAS HDD  |   |   |  |  |
| Max. drives number                  | Note: For the latest compatibility details, refer to c  | our official website for the latest Eor<br>179  |   |  |  |
| Rack Support                        |   | 4U, 19-inch   |   |  |  |
| Dimensions                          |   | 447(W)x175(H  |   |  |  |
| (Without chassis ears/ protrusions) |   |   | , , ,   |  |  |
| Dackago Dimonoiono                  | 591(W)x295(H)x800mm (D)   |   |   |  |  |
| Package Dimensions                  |   | JB 3012A<br>JB 3016A  | JB 3025BA   |  |  |

### SOFTWARE SPECIFICATIONS

# **EonStor GS Family**

|   |   | Data   | a Service   |  |   |  |  |
|---|---|--|---|--|---|--|--|
|   | Snapshot  | Snapshot images per sou<br>Snapshot images per sys   | tem Standard L<br>Standard L  | icense: 64 / Advanced Licer<br>icense: 128 / Advanced Lice                             | ise: 256<br>ense: 4096                        |  |  |
| Local Replication                       | Volume Copy/Mirror  | Replication pairs per sour<br>Replication pairs per syst   |   | icense: 4 / Advanced Licens<br>icense: 16 / Advanced Licer                             |   |  |  |
|   |   | e is included by default and ad  |   |  |   |  |  |
| Thin Provisioning (default included)    |   |  | ge utilization and eliminates   | -  | e space                                       |  |  |
| Self-encrypting drives                  | Unique factory encryp   | tion secures data plus make  | es deletion simple and comp   | ete  |   |  |  |
| Remote Replication(Block level)         | Replication pairs per source volume: 8<br>Replication pairs per system: 64<br>Note: The maximum number of replication pair per source volume is up to 8, regardless of remote asynchronous/remote synchronous/local volume pairs  |  |   |  |   |  |  |
| Remote Replication(File Level)          |   |  | ource volume is up to 6, regard   | less of remote asynchronous/   | remote synchronous/local volume               | pairs  |  |
| ,                                       | Support Rsync with 12   |  | 0   |  |   |  |  |
| Automated Storage Tiering<br>(optional) | SSD`súpports`´  | ge tiers based on drive type   |   |  |   |  |  |
| SSD Cache<br>(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:86B Max SSD Cache Pool Size: 400GB DRAM:128GB Max SSD Cache Pool Size: 3,200GB DRAM:166B Max SSD Cache Pool Size: 1000GB DRAM:256GB Max SSD Cache Pool Size: 3,200GB DRAM:32GB Max SSD Cache Pool Size: 1,600GB DRAM:124GB Max SSD Cache Pool Size: 3,200GB DRAM:64GB Max SSD Cache Pool Size: 1,600GB DRAM:124GB Max SSD Cache Pool Size: 3,200GB |  |   |  |   |  |  |
| EonCloud Gateway                        | Sync Mode: Synchro<br><b>Block-level</b><br>Cache Mode: A copy<br>Backup Mode: All da   | nizing files between local<br>/ of frequently accessed o<br>ta are kept on local stora   | le is kept on a local stora<br>storage and clouod.<br>data is kept on a local sto<br>age and all data are also f<br>local storage and infrequen | -<br>rage and all data are also<br>lushed to cloud.                                    | flushed to cloud.                             |  |  |
|   |   | EonCloud C   | Gateway Versi   | on   |   |  |  |
| Feature                                 | EonCloud (  | Gateway Standard   | EonCloud Gat  | eway Enterprise  | EonCloud Gateway                              | Ultimate   |  |
| Models applied                          |   |  | ided by default. Can be upg<br>ard license is included by def   |  | ise version<br>EonCloud Enterprise or Ultimat | e version  |  |
| Cloud folder sync/cache                 |   | V  |   | v  | V   |  |  |
| Max. cache settings                     | 5 (90   | ) days trial)  |   | 5  | 10  |  |  |
| Cache policy and function parameters    | (90 day<br>Default(LRU)<br>Low priority<br>High priority<br>Uncacheable for u<br>Uncacheable for u  |  | Low<br>High<br>90 d   | ult(LRU)<br>priority<br>priority<br>ays trial for others                               | Low priority Loc<br>High priority Pre         | applicable<br>al only<br>populated<br>uentially-prealloc |  |
| Cloud volume cache                      | (90   | ) days trial)  |   | V  | ٧   |  |  |
| Cloud volume backup                     | (90   | ) days trial)  |   | ٧  | ٧   |  |  |
| Cloud volume tier                       | (90   | ) days trial)  |   | V  |   | v  |  |
| Max. connected folder                   |   | 5  |   | 5  | 32  |  |  |
| Max. connected volume                   |   | 5  |   | 5  | 32  |  |  |
| Cloud folder cache size                 |   | ≦ 1TB  | ≦   | 2PB  | ≦ 2PB   |  |  |
| Cloud volume capacity                   |   | ≦1TB   |   | 2PB  | ≦ 2PB   |  |  |
|   |   |  | e & Support   |  |   |  |  |
| Access right management                 | <ul> <li>User account manag</li> <li>Quota management</li> </ul>  | ement • Group manag  |   | <ul> <li>Folder management -</li> <li>Folder encryption wit</li> </ul>                 |   |  |  |
| Availability and reliability            |   | ppable hardware modules  | Device mapper support     CacheSafe technology  | <ul> <li>Multi-pathing support</li> <li>UPS</li> </ul>                                 |   |  |  |
| Management                              | <ul> <li>Automated cache flu</li> <li>Module status LED ir</li> <li>Storage Resource M</li> </ul>   |  | ence detection & thermal ser<br>ry records of resource usag   |  |   |  |  |
| Notification                            | Email, SNMP traps   |  |   |  |   |  |  |
| NULIIICALIUII                           | • File explorer • Prox  | v server • Syslog server   | • VPN server • SyncClou   | • LDAP server  |   |  |  |
| Applications                            | 110 0 0 0 1 1 0 1   |  | /2012 P2/2016 Window  | 7 SP1 / Windows 8.1, Micr  |   |  |  |
|   | Microsoft Windows Se  | rver 2008 / 2008 R2 / 2012<br>ux, SUSE Linux Enterprise, S   | Sun Solaris, Mac OS X, VMw  |  |   |  |  |
| Applications                            | Microsoft Windows Se  | srver 2008 / 2008 R2 / 2012<br>ux, SUSE Linux Enterprise, 4<br>3-year limited<br>warranty for 2  | Sun Solaris, Mac OS X, VMw<br>hardware warranty and 8x5<br>years)   | bhone, web, and email supp   | ort (Batteries are covered under              |  |  |
| Applications                            | Microsoft Windows Se<br>Red Hat Enterprise Line   | rver 2008 / 2008 R2 / 2012<br>ux, SUSE Linux Enterprise, 3<br>3-year limited<br>warranty for 2<br>Replacement p<br>Advanced serv<br>(up to 5 years)<br>Premium servi | Sun Solaris, Mac OS X, VMw<br>hardware warranty and 8x5<br>years)<br>vart dispatch on the next bus<br>rice: 24x7 phone, web, and e              | bhone, web, and email supp<br>iness day (up to 5 years)<br>mail support + onsite diagr |   |  |  |

Asia Pacific (Taipei, Taiwan) Infortrend Technology, Inc. Tel:+886-2-2226-0126 E-mail : sales.tw@infortrend.com China (Beijing, China) Infortrend Technology, Ltd. Tel:+86-10-6310-6168 E-mail:sales.cn@infortrend.com Japan (Tokyo, Japan) Infortrend Japan, Inc. Tel:+81-3-5730-6551 E-mail : sales.jp@infortrend.com Americas (Sunnyvale, CA, USA) Infortrend Corporation Tel:+1-408-988-5088 E-mail : sales.us@infortrend.com EMEA (Basingstoke, UK ) Infortrend Europe Ltd. Tel:+44(0)-1256-305-220 E-mail : sales.eu@infortrend.com



2019 Infortrend Technology, Inc. All rights reserved. Any information provided herein is without warranties of any kind of and is subject to change without prior notice. Infortrend® and EonStor® are trademarks or registered trademarks of Infortrend Technology, Inc., other trademarks are the property of their respective owners.

EonStor GS\_family\_PRN\_PDS\_v3.0