

Powerful data deduplication for improved backup and disaster recovery operations



## IBM System Storage TS7650G ProtectTIER Deduplication Gateway



### Highlights

- ***Improves backup and recovery and simplifies disaster recovery operations.***
- ***Lowers operational costs and energy usage.***
- ***Manages more data with less infrastructure.***

The IBM System Storage™ TS7650G ProtectTIER® Deduplication Gateway is designed to meet the disk-based data protection needs of the enterprise data center while enabling significant infrastructure cost reductions. The solution offers industry leading inline deduplication performance and scalability up to 1 petabyte (PB) of physical storage capacity per system that can provide up to 25 PBs of storage capacity\*. Combined with IBM storage, the ProtectTIER Gateway solution provides

a powerful disk-based repository to improve the retention and availability of backup and archive data.

The TS7650G combines a virtual tape library solution with inline data deduplication powered by IBM's patented HyperFactor® technology. This technology enables significant savings in disk requirements and costs.

The IBM System Storage TS7650G ProtectTIER Deduplication Gateway features:

- *Performance—up to 1000 MB/s or more sustained inline deduplication*
- *Capacity—easily scalable to provide a repository for up to 25 PBs or more of backup data*
- *Data Integrity—non-hash-based approach avoids possibility of data loss due to hash collision*
- *Non-Disruption—inline approach ensures backup windows are met and existing operations not disrupted*
- *Production proven—tested and proven in hundreds of production environments around the globe*

The IBM System Storage TS7650G ProtecTIER Deduplication Gateway solution is an enterprise-class, data protection platform designed to quickly and safely protect business information while reducing the amount of space required for storage—customers can experience up to 25 times or more storage capacity reduction.

ProtecTIER's native replication technology enables virtual tape cartridges to be replicated to a remote location for enhanced disaster recovery and business continuity. By eliminating the need to physically transport actual tape

cartridges, data can be recovered faster and more reliably enabling systems to get back online quicker in the event of a disaster or major system outage. It also lowers the total cost of ownership of backup and recovery by eliminating the costs associated with moving and storing physical tape cartridges.

ProtecTIER Native Replication technology provides:

- *High-speed replication or “moving” of virtual tapes from primary to remote site*
- *Enterprise-class data integrity level on both sides*
- *Remote site can become primary site during “disaster”*

- *Cartridges can be cloned to tape at remote site*
- *Replication occurs concurrently with backup and inline deduplication*
- *Easy to use GUI based management & monitoring tools*

Deploying the IBM System Storage TS7650G ProtecTIER Deduplication Gateway solution can help organizations more efficiently protect their corporate data on disk-based storage while helping them manage the exponential growth of new data through reduction or elimination of duplicate data in their backups.

## IBM System Storage TS7650G ProtecTIER Deduplication Gateway Hardware at a glance

<b>Form factor/height</b>	Rack/4U per chassis
<b>Base unit</b>	x3850 M2/x3950 M2 [5619,5654]
<b>Processor</b>	3x Intel® Six Core Xeon® Processor X7460 (2.66 GHz 9 MB L2 cache) [3644,4416]
<b>Memory</b>	16x 2 GB PC2-5300 CL5 ECC DDR2 SDRAM RDIMM [3644]
<b>Memory exp. card</b>	Memory Expansion Card [4894]
<b>Hard drives</b>	2x 146 GB 10 K 2.5-inch Hot-Swap SAS [5534]
<b>Bay fillers</b>	2x 2.5-inch HDD Filler [0804]
<b>Optical drive</b>	UltraSlim Enhanced SATA Multi-Burner [4163]
<b>Network interface</b>	Integrated dual Gigabit Ethernet w/TCP-IP off-load engine
<b>Power supply</b>	1440 W 220 V 2/2 [1991]
<b>RAID controller</b>	ServeRAID-MR10k SAS/SATA [3557]
<b>RAID configuration</b>	Mirror SAS set (RAID1) [8142]
<b>Expansion cards (a)</b>	2x Emulex 4 GB FC Dual-Port PCI-Express [1699]
<b>Expansion cards (b)</b>	2x QLogic 4 Gb FC Dual-Port PCI-Express [3568]
<b>Expansion cards (c)</b>	PRO/1000 PT Dual Port Server Adapter [2944]



### For more information

To learn more about the IBM System Storage TS7650G ProtecTIER Deduplication Gateway, please contact your IBM marketing representative or IBM Business Partner, or visit the following Web sites:

The TS7650G ProtecTIER Deduplication Gateway Web page:  
[ibm.com/systems/storage/tape/ts7650g](http://ibm.com/systems/storage/tape/ts7650g)

The main ProtecTIER Deduplication Web page:  
[ibm.com/systems/storage/tape/protectier](http://ibm.com/systems/storage/tape/protectier)

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Route 100  
Somers, New York 10589

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