



ExaGrid Tiered Backup Storage

- Fastest Backups
- Fastest Recoveries
- Unparalleled, Cost-effective Scale-out
- Comprehensive Security and AI-Powered Ransomware Recovery

ExaGrid Tiered Backup Storage Product Line Models and Configurations

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone, long-term retention repository, scale-out architecture and unique solution for ransomware recovery. The system scales as needed by adding ExaGrid appliances, which virtualize into a single scale-out system automatically, adding capacity and processing power while acting and being managed as one unified system.

ExaGrid's AI-Powered Retention Time-Lock for Ransomware Recovery (RTL) includes a non-networking-facing Repository Tier (tiered air gap), Auto Detect & Guard for automatic detection of anomalous deletes, delayed deletes and immutable data objects, all to ensure that data is ready to be restored after a ransomware attack or other cyber attack.

ExaGrid Tiered Backup Storage utilizes a scale-out architecture, where each appliance has both compute and capacity which allows the system to linearly scale which provides a fixed-length backup window as data grows. The front-end disk-cache Landing Zone, along with Adaptive Deduplication, coupled with a non-network-facing (tiered air gap) Repository Tier allows for:

- Support of over 25 backup applications and utilities including Veeam, Rubrik, Commvault, Cohesity, NetBackup, HYCU and more than 20 others
- Fastest backups and shortest backup windows with optimal recovery point at disaster recovery site
- Fastest full system restore
- Boot a VM in minutes versus hours
- Fixed-length backup window as data grows
- Non-network-facing tier with Auto Detect & Guard, delayed deletes, and immutable data objects in order to recover from a security event such as a ransomware attack
- Integrations with backup application scale-out features for automated job management and front-end load balancing
- Automatic repository load balancing and global deduplication
- Seamless scalability as data grows with no forklift upgrades
- No planned product obsolescence, as any age and any size appliance can be mixed and matched in a single system
- Protected data at rest with 256-bit AES encryption (available in ExaGrid SEC hardware models or using Software Upgradeable SEC in select appliance models); data is encrypted on the disk storage using FIPS 140-2 Validated
- Self-Encrypting Drives (SEDs) for data encryption at rest in nanoseconds, improving backup performance
- Both all HDD or all SSD appliances options support all the same features and functions

With ExaGrid Tiered Backup Storage, backups are written directly to a disk-cache Landing Zone to avoid inline processing and ensure the highest possible backup performance. In addition, ExaGrid uses advanced protocols, integrations with leading backup applications, job concurrency and encryption at rest at the drive level. The combination of the Landing Zone and advanced performance features results in the shortest backup window. Adaptive Deduplication, which avoids inline deduplication, performs deduplication and replication in parallel with backups while providing full system resources to the backups for the shortest backup window. Available system cycles are utilized to perform deduplication and offsite replication for an optimal recovery point at the disaster recovery site. Once complete, the onsite data is protected and immediately available in its full undeduplicated form for HDD systems and fast rehydration for SDD—for fast restores, VM Instant Recoveries, and tape copies while the offsite data is ready for disaster recovery.

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Full (TB)	Up-To Backup Thruput (TB/hr)	Form Factor	Optional Data at Rest Encryption (SEC)
ExaGrid Appliances - HDD						
EX36	96	72	36	7.90	2U	√
EX54	162	108	54	5.80	2U	√√
EX81	216	162	81	8.70	2U	√√
EX84	192	168	84	15.25	2U	√√
EX135	324	270	135	14.50	2U	√√
EX189	432	378	189	20.30	2U	√√
ExaGrid Appliances - SSD						
EX90-SSD	131	108	90	115.20	2U	√√
EX135-SSD	184	161	135	115.20	2U	√√
EX270-SSD	369	323	270	115.20	2U	√√
EX540-SSD	737	645	540	115.20	2U	√√

In addition, ExaGrid offers these appliance models to accommodate larger organizations that have smaller data center locations worldwide:

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Full (TB)	Up-To Backup Thruput (TB/hr)	Form Factor	Optional Data at Rest Encryption (SEC)
HDD Appliances for larger accounts with smaller data center locations						
EX10	32	20	10	3.90	2U	√
EX20	64	40	20	4.40	2U	√

√ = Software Upgradeable SEC for Data Encryption at Rest

Simple, Turnkey Appliances

ExaGrid’s appliances work seamlessly with the industry’s leading backup applications and typically installs in about 30 minutes to 3 hours. The product line’s multiple appliance models can be combined into a single scale-out system of up to 12.09PB usable capacity for HDD and 20.64PB for SSD, allowing full backups of up to 6.04PB for HDD and up to 17.3PB for SSD. *Note:* A single system can consist of up to 32 HDD appliances or 32 SSD appliances of any age or size, but must be homogenous within the same system.

ExaGrid appliances are comprised of Intel® or AMD processors, enterprise HDD SAS or SSD drives, RAID6 with hot spare, and ExaGrid software. Since each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size, as each appliance is added into a single scale-out system, performance is maintained and backup times do not increase as data is added. This combination of capabilities in a turnkey appliance makes the ExaGrid system easy to install, manage, and scale.

Comprehensive Security Features — External Key Management and Data Encryption at Rest (SEC options)

ExaGrid appliances include support of KMIP (Key Management Interoperability Protocol) using

KMIP 1.4 standard, which ensures secure and efficient communication for key lifecycle operations, including key generation, retrieval, rotation, and deletion.

ExaGrid’s larger appliance HDD models, including the EX54, EX81, EX84, EX135, and EX189, as well as ExaGrid’s SSD models, offer a Software Upgradeable SEC option to provide Data Encryption at Rest. SEC hardware models that provide Data Encryption at Rest are also available for ExaGrid’s entire line of appliance models.

Scalable Architecture

Multiple core ExaGrid disk-based backup appliances include scale-out computing software which allows them to virtualize into one another when added to the system. Once virtualized, they appear as a single pool of long-term capacity. Capacity load balancing of all data across servers is automatic, and multiple systems can be combined for additional capacity. Data is load-balanced across all appliances in the system to ensure the best deduplicated storage efficiency.

High Density 2U Models for Rackspace Efficiency

All ExaGrid appliance models are in a 2U form factor, offering rack space efficiency which allows organizations to save on rack storage and cooling costs while accommodating large data backups and future data growth.