

**R I M A G E<sup>®</sup>**  
**ENTERPRISE**  
**LASER STORAGE**

# Secure Storage for Long-Term Digital Data Preservation

A staggering amount of data is being generated around the world each day. A reality that is only accelerating with the growing popularity of IoT and AI. Having large amounts of abandoned or uncategorized data can have grave consequences for the security of your business. Storing legacy data in expensive and resource-intensive cloud or on-premise storage is costly and bad for the sustainability of our planet.

**Data centers are currently responsible for approximately 2% of global carbon emissions, a similar share as the entire aviation industry. This is projected to increase to 14% by 2040.**

**- Climate Neutral Group  
& Computer World**

**Companies need a low-cost, secure, and stable storage mechanism that is immutable and has a long shelf-life. To fill this need, a proven technology is seeing a new resurgence. And for good reason.**

## INTRODUCING ENTERPRISE LASER STORAGE

**A solution that provides companies with a high-capacity, tamperproof method to store, archive, and preserve important organizational data so that it is impossible to delete, impossible to re-encrypt, impossible to infect, and truly immutable.**

## Data center energy consumption and carbon emissions are growing rapidly due to:

- ◆ Rising popularity of cloud computing and other data-intensive applications
- ◆ Growing number of connected devices, such as smartphones, tablets, and wearables
- ◆ Increasing demand for high-performance computing (HPC) for applications such as artificial intelligence and machine learning.

## Benefit from the unique characteristics of optical laser storage:

- ◆ More affordable storage means less reliance on expensive cloud storage
- ◆ 50- to 100-year durability gives confidence in the long-term preservation of your most critical data archives
- ◆ Offline storage brings energy efficiency to reduce environmental impact
- ◆ Better protection against data breaches, unauthorized access, and data loss

We all have a role to play in making it more sustainable.

## Important Optical Technology Advancements:

**Higher Capacity:** Near-term advancements in optical discs will deliver some of the highest capacity of any storage type on the market with the expectation of realizing up to 100 times current density. Blu-ray discs, for example, can now store up to 128GB. This increase in capacity allows for storing larger amounts of data, including high-definition videos and complex software applications.

**Multi-Layer Technology:** Using multi-layer technology, optical discs enable the stacking of multiple data layers on a single disc. This allows for higher-density data storage by increasing storage capacity without significantly increasing the physical size of the disc.

**Faster Data Transfer Rates:** Advancements in optical disc technology have led to faster data transfer rates. For instance, the introduction of Blu-ray discs with higher data transfer speeds, such as 12x or 16x, allows for quicker reading and writing of data.

**Improved Laser Technology:** The laser technology used in optical disc drives has more precise reading and writing capabilities. This improvement contributes to better error correction, reduced data loss, and enhanced overall performance. High-powered lasers also allow for secure destruction of optical media that includes a certificate of destruction.

**Archival-Grade Discs:** Specialized archival-grade optical discs offer enhanced data longevity and reliability. These discs are manufactured with materials and processes that prioritize long-term data preservation. They typically have higher resistance to environmental factors, such as humidity and light exposure, reducing the risk of data degradation over time.

**Point-in-Time Data Recovery:** As the risk and sophistication of cyberattacks increase, enterprises need to prepare for everything from data hacking to maliciously manipulated information. Having an archive of mission-critical data in an encrypted, unchangeable, point-in-time data reference point is an important security protocol.

## Rimage: 40 Years of Innovation

Rimage delivers data management solutions that help organizations better manage data assets, lower costs, defend against cyberattacks, and protect data integrity to meet long-term data preservation and compliance requirements. Using advanced AI technology combined with our data storage, engineering, robotics, and software capabilities, we provide customized, bundled solutions that integrate into any workflow and are tailored to your requirements.

**Contact us to schedule a demo and see how our Enterprise Laser Solution can provide your organization with secure, sustainable storage for your long-term data preservation.**