



Preservation storage unit.

REINVENTING DIGITAL PRESERVATION STORAGE

Storage for long-term digital preservation has different requirements from traditional methods. First of all, because of the required capacity: on many occasions only the initial petition multiplies all the available storage. Also because of usage: preserved data should remain for the long term, never to be modified and with very low access levels (in many cases only for audits and inspections). Security is the key to preservation, since the preserved copy is, on many occasions, the final repository for digital information and the transference speed is not always relevant.

Therefore, using a high performance storage system, designed for transactional processes and data mining and surrounded by a great quantity of sophisticated, expensive software is very inefficient; if we opt for low-cost models we can have reliability issues that compromise the preservation plan. Backup on tape readers is also not a good solution, since they don't allow the content to be audited easily, they lose their legibility in an average of five years and they are subject to technology obsolescence (applications and back-up disks change in a short amount of time).

libdata is **libnova's** storage unit designed especially for fulfilling the needs of a long-term digital preservation plan at a very low acquisition and operation cost.

MADE FOR PRESERVATION

libdata has the characteristics preservation needs: simplicity, high capacity, low cost and security.

Integrated with **libsafe**, this takes care of all the details regarding your preservation plan and content inventory.

HIGHLY EFFICIENT

The **libdata** unit is capable of selectively turning off disks that have not been accessed, which is why its cooling and energy costs are minimal.

Also the space it occupies: up to 2.5 petabytes on a standard 42U rack.

CONTROL YOUR COSTS

With **libdata** you don't need to pay for licenses or services that you will not use when preserving your data.

Also, the acquisition investment and the maintenance costs are reduced drastically.

RELIABILITY AND SECURITY

libdata incorporates RAID protection and remote support. Integrated with **libsafe**, it performs audits and preventive measures on disks and content.

Platform access is controlled for every user.

EASY TO INTEGRATE

libdata is integrated with regular data center procedures for operating and monitoring.

The management software developed by **libnova** makes it easy to configure and maintain.

OPEN TO THE FUTURE

The **libdata** units can be installed in geo-distributed architectures and in the Cloud.

This gives your data preservation an additional layer of security.

features and technical specifications

libdata is **libnova**'s storage unit especially designed for long-term digital preservation. We present you with three models: libdata M5-24, M5-36 and M5-72 with the capacity for 24, 36 and 72 disks respectively, each one with capacities of 2Tb, 3Tb or 4Tb (in the future they will be able to handle even greater capacities).

libdata is integrated with **libsafe** for the construction of repositories that provide integral support to your long-term digital preservation plan.

Capacity:	<ul style="list-style-type: none"> ▪ libdata M5 with capacity from 8 to 72 disks. ▪ It is supplied with 2Tb, 3Tb or 4Tb disks. ▪ Raw capacity from 16Tb to 288Tb.
Redundancy:	<ul style="list-style-type: none"> ▪ Internal RAID for data protection. ▪ It can be configured for multiple copies per object that replicate and change themselves in an intelligent form (with libsafe). ▪ Remote security copy geo-distributed by libsafe and other libdata units, traditional storage units or cloud storage services.
Security measures for preservation:	<ul style="list-style-type: none"> ▪ Proactive potential error detection in the disk and error detection in the preserved objects ▪ Integrated with libsafe, creating a virtual layer that isolates the object and only allows access to a copy, avoiding manipulation errors. ▪ All executed tasks are tracked via reports sent to the operator by email.
Intelligent switch-off:	<ul style="list-style-type: none"> ▪ Disks that are not in use are kept disconnected until access is requested or the system anticipates their use thanks to the technology <i>deep-sleep</i> from libnova.
Conectivity:	<ul style="list-style-type: none"> ▪ 4 ports RJ45 Gigabit Ethernet + 1 port RJ45 dedicated to administration (IPMI). ▪ Certified for use with Microsoft Windows Server 2012, Red Hat 6u3 and VMWare ESXi 5.0.
Power supply and cooling:	<ul style="list-style-type: none"> ▪ Seven x 8 cm diameter fans redundant and hot replaceable. ▪ Energy supply source 1280W at high efficiency, connection 180-240V, 8-6A, 50-60Hz.
Dimensions:	<ul style="list-style-type: none"> ▪ Chassis form factor: 4U rack mountable. ▪ Dimensions: 437mm wide by 178mm high by 699mm deep. ▪ Net weight 30.4Kg.
Functioning ranges:	<ul style="list-style-type: none"> ▪ In use: Temperature 10°C to 35°C, relative humidity 8% to 90% without condensation. ▪ Not in use: Temperature -40°C to 70°C, relative humidity 5% to 95% without condensation. ▪ All components comply with RoHS norms.

libnova: digital preservation made easy.

libnova's mission is to offer you our products and our experience to help you meet your goal: **Preserving the knowledge and the memory of the future**. We have adapted these tools to the digital object's life cycle (creation-dissemination-preservation) and to the user's needs, making them intuitive, powerful and flexible.

Would you like to know how **libnova**'s tools could help you? Get in touch with us and give us 30 minutes. We will show you how they can contribute to the success of your digitisation, preservation and digital dissemination projects.