Synology®

ActiveProtect Appliance

DP7400

Cyber-resilient Data Protection Solution for Data Centers

The Synology ActiveProtect appliance DP7400 is a data protection solution that comes pre-configured with hardware that runs ActiveProtect Manager, an operating system designed specifically for backup purposes. With its ability to perform backups, restore, deduplicate, replicate, and manage while ensuring security, the DP7400 is an ideal core management server for your company headquarters. It seamlessly integrates all current and future workloads across multiple sites into clusters, enabling centralized management through a single platform. With immutability, air-gapped backups, and access control, the DP7400 protects against ransomware attacks, and secures all your data.

Highlights

- **Deploy quickly**
  Set up your server in minutes

- **Safeguard all workloads**
  Protect VMs, SaaS, databases, physical servers, and more

- **Scalability and visibility**
  Manage up to 150,000 workloads across multiple sites, monitor servers, and backup status

- **Reliable backup**
  Verify backups and test your disaster recovery plan in a sandboxed environment

- **Flexible recovery**
  Perform bare-metal, file-level recovery, or P2V/V2V instant restoration to meet your RTO needs

- **Ransomware defense**
  Leverage source-side global deduplication and a specialized backup engine

- **Optimized backup efficiency**
  Perform bare-metal, file-level recovery, or P2V/V2V instant restoration to meet your RTO needs

- **Data security**
  Implement least privilege with access controls, firewall, and isolation for a robust architecture

Quick and seamless deployment

Essential configuration such as disk partitioning and raid array setup will be automatically completed , making deployment fast and effortless so that you can start protecting your data immediately.

Protect workloads with specified policies

Safeguard all your workloads, including VMware vSphere, Microsoft Hyper-V, Windows, macOS, Linux, NetApp ONTAP, Nutanix Files, Microsoft 365 services, Oracle Database, and Microsoft SQL server. Establish policies for companies to meet SLA requirements, and automate data protection by detecting existing and future workloads, ensuring that the workloads are secured under the appropriate policies. View, modify, and manage policies with ease.

Scalability and visibility

The DP7400 offers on-demand scalability. Not only does the DP7400 manage up to 2,500 servers and 150,000 workloads from a single platform, it also provides visibility into the hardware status of remote backup appliances and performs remote operations . The dashboard consolidates key information within the cluster, giving you a clear overview of all your workloads. Additionally, custom alerts allow for real-time monitoring of appliances and data status.

Reliable backup and flexible recovery

The DP7400 supports self-healing functionality with continuous detection of silent data corruption through Btrfs checksum. It ensures zero errors by repairing corrupt data via RAID technology. To verify the recoverability of backup data, disaster recovery drills can be regularly performed in a sandboxed environment without affecting your primary production site. Backup verification is also available, automatically generating recovery drill videos for auditing purposes. In the event of a disaster, data can be flexibly restored based on your Recovery Time Objectives (RTO) via entire machine restoration, file-level

recovery, physical-to-virtual (P2V), or virtual-to-virtual (V2V) methods to restore data to the designated location.

Uncompromised ransomware protection

To prevent ransomware attacks, the DP7400 protects data backups and backup copies with immutability and write-once-read-many (WORM) storage to ensure that no one can modify data that has been backed up during the specified retention period. Additionally, it integrates encryption capabilities, enabling data to be encrypted locally before being backed up to remote destinations. To further enhance security, you can also isolate the remote environment using the air-gap feature.

Optimized backup efficiency

The DP7400 optimizes storage space allocation via hardware and software integration. By leveraging SSD cache to store backup-related metadata, optimizing data organization, and consolidating multiple files into a single image, it accelerates data processing. Both backups and backup copies utilize global source-side deduplication, as it compares data at the source and only transmits non-duplicate data to save bandwidth and storage space.

Data security at its core

The DP7400's security mechanism is based on the principle of least-privilege authentication and network protection architecture. This mechanism only allows authorized personnel to access data, restricts access to specific devices, and limits access to the backup infrastructure during designated times to ensure data security.

- **For authorized personnel:** Active Directory, LDAP, and SAML 2.0 integration enables enterprises to use existing SSO with MFA and granular permissions to enhance access control.
- **For devices:** Firewall settings can be configured to only allow access from devices within specified IP ranges and subnets. The built-in management port is an isolated interface dedicated for management purposes. It is separate from data flow to reduce security risks.
- **Enhanced isolation:** Remote backup infrastructure can be further secured via air-gapped solutions to achieve network or physical isolation. Combine this with scheduled backups to control network access during specified times or by directly powering devices on or off.

Hardware Overview
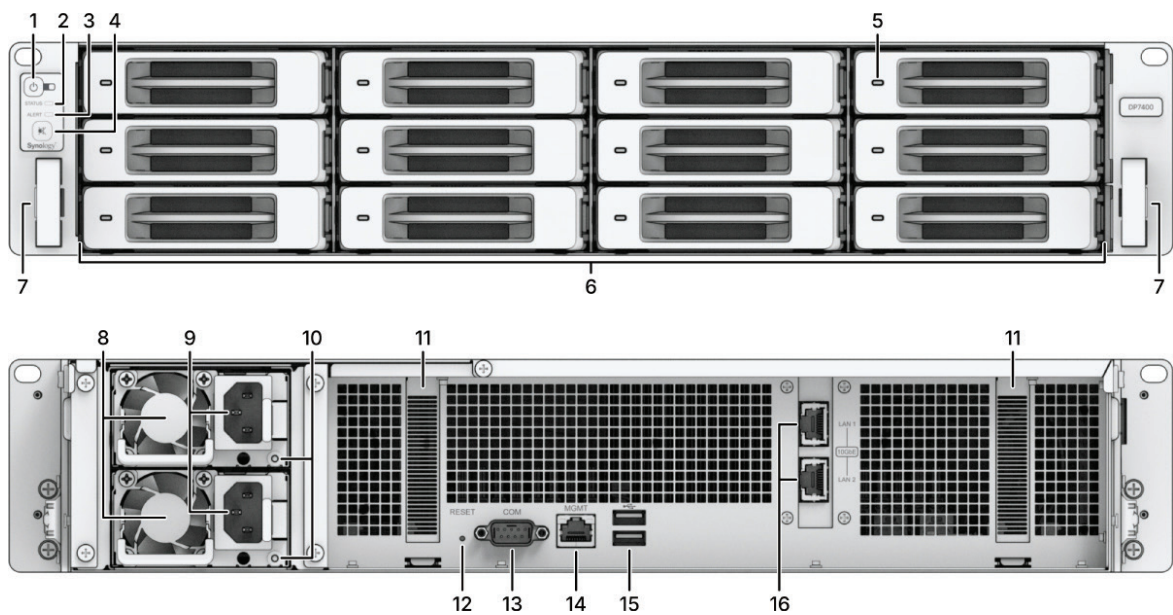
1	POWER Button	**2**	STATUS Indicator	**3**	ALERT Indicator	**4**	Mute Button
5	Drive Status Indicator	**6**	Drive Trays	**7**	Rail Kit Release Tabs	**8**	PSU Fans
9	Power Ports	**10**	PSU Indicators	**11**	PCI Express Expansion Slots	**12**	RESET Button
13	Console Port	**14**	Management Port	**15**	USB 3.2 Gen 1 Ports	**16**	10GbE RJ-45 Ports

Technical Specifications

General Specifications

Suggested Backup Source	* 83.5 TB (350 Machines or 3,300 SaaS Users)
Suggested Built-in VM	** 9
Suggested Cluster Size	Manage up to 2,500 servers or 150,000 workloads in a cluster and can also function as a managed server

* These statistics are based on telemetry data and may vary depending on your company's usage.

** The maximum number of concurrent VMs can be expanded to 17 with 128 GB of memory (additional memory modules required).

Hardware Specifications

Form Factor	2U
CPU	AMD EPYC 7272 (12 cores)
Memory	64 GB
Storage Configuration	10 × 20 TB HDD (RAID 6 + 1 Spare) 2 × 3840G SSD (RAID 1)
Network Interface	1 × 1GbE RJ-45 Port (Management) 2 × 10GbE RJ-45 Port (Data transfer) (Optional) 2 × 10GbE/25GbE SFP28 (Data transfer)
Dimensions (HxWxD)	88 × 430.5 × 692mm
Weight	23.4 kg
Operating Temperature	32 to 95°F (0 to 35°C)
Storage temperature	-5 to 140°F (-20 to 60°C)

Environment and Packaging

Certification	FCC, CE, UKCA, BSMI, RCM, NCC, VCCI
Environmental safety	RoHS, REACH
Package contents	• 1 x DP7400 main unit • 10 × 3.5" SATA HDD • 2 × 2.5" SATA SSD • 2 x C13 to C14 Power Cord • 1 x Front Cover • 1 x Accessory Pack • 1 x Quick Installation Guide
Warranty	5 years

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