Symantec NetBackup™ 5220 Appliance
A single-vendor, enterprise backup appliance that installs in minutes.

Data Sheet: Data Protection

Overview
Symantec NetBackup™ 5220 is an enterprise backup appliance with expandable storage and intelligent end-to-end deduplication for physical and virtual environments. Only Symantec appliances deduplicate on both the client and target. Equipped with Symantec™ V-Ray technology, it provides unique visibility into virtual environments that speeds recovery and reduces storage costs. Content-aware deduplication reduces the size of backups so you can backup and replicate faster.

What’s new
- **Ultimate virtual machine protection**—Built-in support for VMware vSphere™ and Microsoft Hyper-V®, no proxy servers required.
- **Expanded capacity**—Protect hundreds of terabytes of backup data.
- **Wide Area Network (WAN) optimization**—Up to 10x faster transfer rate for backups to cloud and replication.
- **NetBackup Accelerator**—Delivers traditional full backups at the speed of incremental backups.
- **Simple and fast snapshot replication**—Accelerate snapshot replication management and granular file level recovery from any replicated snapshot image.
- **Symantec™ Critical System Protection**—Protects against zero-day attacks and malicious insider threats.
- **Heterogeneous cloud gateway**—Serves as a gateway unit for sending backups to supported cloud storage vendors.

Product highlights
- **Suitable for any environment**—Starting at 4 TB usable capacity and expandable up to 72 TB, NetBackup 5220 is ideal for both remote offices and enterprise data centers.
- **Multiple functional roles**—NetBackup 5220 can be deployed as master server, media server with built-in deduplication, or both for a NetBackup domain.
- **Fits into existing NetBackup environments**—Easily expand or refresh existing NetBackup environments, no separate management required.
- **Operational simplicity**—Sets up in a matter of minutes with pre-installed NetBackup.
- **Improve resource utilization**—Decrease backup storage up to 50 times and bandwidth consumption up to 99 percent.
- **Flexible deduplication options**—Deduplication at source or target; inline or post-process.
- **Dynamic storage**—Usable capacity can be any combination of up to 64 TB deduplication pool, or 72 TB Advanced Disk pool.
- **Storage Area Network (SAN) client support**—High-speed streaming through Fibre Channel to NetBackup 5220.
- **Simple front-end TB licensing**—Pay once for deduplication and replicate securely to any number of targets.
- **Built-in replication**—Policy based replication powered by Symantec™ OpenStorage.
- **Auto Image Replication**—Replicate backup images to a remote NetBackup domain for electronic vaulting and disaster recovery readiness.
- **Secures in-flight and at-rest backup data**—Encryption may be configured for source and target deduplication.
- **Tape support**—Write to tape for long term data retention.
**Operational simplicity and easy integration**
The NetBackup 5220 comes pre-installed with the latest NetBackup software and can be set up in a matter of minutes to start a new NetBackup deployment or may be integrated into existing NetBackup deployments. The appliance can be easily managed via an existing instance of the NetBackup OpsCenter management console. Symantec provides end-to-end technical support for the appliance, reducing operational overhead on IT teams.

**Suitable for both data centers and remote offices**
NetBackup 5220—4TB model is a 2U appliance with deduplication storage is ideal for remote offices. The appliance may also be deployed as a media server in large data centers to stream backups to a NetBackup 5000 series global deduplication pool via Fibre Channel or Ethernet.

**Protect up to 3,000 virtual machines with one appliance**
NetBackup 5220 provides end-to-end protection for vSphere virtual environments. Unlike other solutions, the NetBackup 5220 delivers off-host backups with no requirement for proxy servers thereby eliminating associated complexity, cost, and resource overhead. Powered by V-Ray, NetBackup 5220 automatically discovers and protects virtual machines. The unique V-Ray vision delivers the flexibility to recover entire virtual machine, individual files, full applications, and individual application objects from a single-pass backup. The intelligent deduplication engine can see into actual objects in the backup stream for superior deduplication across all virtual and physical machines in your environment. The award-winning unification allows for more standardization and consistent policies, reduced duplication of effort, eliminates redundant storage pools, and lowers licensing, training, and operational costs. Protect your virtual machines through deeper integration with VMware vStorage Application Programming Interfaces (APIs) for Data Protection (VADP), end-to-end SAN transport, block level incremental backups, and application intelligence, all integrated in a turnkey appliance.

**Intelligent deduplication for up to 36x faster backups**
Only Symantec provides purpose-built backup appliances with intelligent end-to-end deduplication. NetBackup 5220 has built-in ability to deduplicate data in the backup stream at any point from source to target storage. It provides the flexibility to switch the location of deduplication processing among source client, backup server, and target storage without affecting the overall deduplication rate. The result is up to 36x faster backups than traditional target deduplication appliances. The intelligent deduplication engine sees into the data stream and accurately identifies files and object boundaries for efficient deduplication delivering up to 50x storage reduction and up to 99 percent bandwidth reduction for backups.

NetBackup 5220 supports both inline and post-process deduplication. It can be partitioned as deduplicate or non-deduplicate storage or a combination of the two. This feature is especially useful for solving the problem of backup windows and backup storage growth via one single backup solution.

**Full backups at the speed of incrementals**
NetBackup 5220 tackles the challenges of backing up hundreds of millions of files, or performing thousands of backups simultaneously. With a single click from the NetBackup management console, NetBackup Accelerator can perform a full backup at the speed and cost of an incremental backup without sacrificing the fast recovery time associated with full backups. It can help meet ever more demanding backup and recovery SLAs. With the built-in track log, NetBackup Accelerator works independent of file system types.

**Built-in WAN optimization for backups and replication**
With NetBackup 5220 business continuity got easier and more efficient. The WAN optimization driver is built right into the appliance, allowing you to leverage current WAN infrastructure for backups to the Cloud and replication to remote sites by delivering up to 10x faster transfer rate.
Critical System Protection to safeguard backups

The risk to business critical data is the same whether the security for corporate information is compromised at the primary or backup storage. That is why NetBackup 5220 is equipped with Critical System Protection agent. This unmanaged agent enables Host Intrusion Detection System for granular level monitoring and auditing. If your environment is secured by Critical System Protection server, you also have the option to manage the embedded agent. This brings the capability to enable full Intrusion Prevention Service to proactively protect the NetBackup 5220 against zero-day attacks and malicious insider threats.

Simplify snapshot management and protection

NetBackup 5220 integrates with a variety of different disk array- and software-based snapshot methods, including off-host backup and instant recovery. This simplifies and expedites the recovery of individual files and applications from a snapshot image without having to mount the entire image. Snapshots and replicas are now managed in the same NetBackup policy, catalog, and schedule interface as tape or any other type of streaming backup.

Built-in replication with optimized duplication

The backups in NetBackup 5220 deduplication storage pool can be replicated to other compatible targets. The target devices could be in the same NetBackup domain (optimized duplication) or in a different NetBackup domain (Auto Image Replication). In both cases, replication is bandwidth optimized; the source will not send data segments already present in the target deduplication pool thereby minimizing the bandwidth usage between sites. In contrast with traditional replication solutions where source and targets are in sync using remote mirror retention, NetBackup Appliances use optimized duplication where retention levels can be controlled independently at both source and target. NetBackup 5220 can send replicated data to NetBackup 5020 through Fibre Channel as well. Encryption may also be used for replication at no additional cost.

Auto Image Replication (AIR) provides the ability to automatically manage the replication of a deduplicated backup image from one NetBackup master server domain to another. It enables fast and scalable data recovery because backup images are available for immediate recovery from any domain or global location, with minimized storage footprint and bandwidth impact.

NetBackup SAN client support

NetBackup 5220 may be configured as a Fibre Transport Media Server to stream backups through SAN for high-speed backups. This method is ideal for clients with large data sets that do not want to perform deduplication at the source. The SAN Clients could also be a VMware® backup host or Hyper-V host, thereby enabling end-to-end SAN transport for virtual machine backups.

Heterogeneous cloud gateway

Backup to cloud storage providers with NetBackup 5220. It is the industry’s first heterogeneous cloud gateway for backups. Whether it is AT&T™ Synaptic, Amazon® S3, RackSpace®, or Nirvanix® Storage Delivery Network (SDN), NetBackup 5220 becomes your backup gateway with a few mouse clicks.

Tape support

NetBackup 5220 provides a tape out option which is ideal for organizations that wish to use a hybrid approach for data protection consisting of disk, cloud, and tape backups. Backups may be directly streamed to tape or staged via deduplicate/non-deduplicate disk storage pool.

Reliable hardware platform

NetBackup 5220 and optional storage shelves are built on enterprise class hardware. Both feature redundant power supplies, fan modules, and hot pluggable data disks.

Hardware monitoring and call home feature

NetBackup 5220 provides periodic monitoring of key hardware components such as CPU, disks, power supplies, fans, RAID groups, and host bus adapter (HBA) cards. Additionally, it notifies the administrator of faulty events. The
hardware monitoring feature ensures that your backup environment is working at top efficiency, allowing you to anticipate needs before they become issues.

The Call Home feature keeps a watchful eye on a multitude of preset conditions and maintains a history of the product’s health on Symantec’s Call Home server. This hardware history is available to the Symantec™ Global Support Center to use while assisting with support cases, providing useful context to resolve issues in a timely manner.

**Platform and application support**¹

All core NetBackup software agents can be utilized with the NetBackup 5220. NetBackup agents optimize the performance of critical databases and applications.

---

### Technical specifications

<table>
<thead>
<tr>
<th></th>
<th>NetBackup 5220</th>
<th>Storage shelf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable storage capacity (TB)²</td>
<td>4</td>
<td>24 or 36</td>
</tr>
<tr>
<td>Storage shelves (max)</td>
<td>2</td>
<td>NA</td>
</tr>
<tr>
<td>1 Gb Ethernet ports</td>
<td>6</td>
<td>NA</td>
</tr>
<tr>
<td>10 Gb Ethernet ports</td>
<td>up to 2</td>
<td>NA</td>
</tr>
<tr>
<td>8 Gb Fibre Channel ports</td>
<td>up to 6</td>
<td>NA</td>
</tr>
<tr>
<td>Dimensions H x W x D (inches)</td>
<td>3.4 x 16.9 x 27.7</td>
<td>5.1 x 17.6 x 22.1</td>
</tr>
<tr>
<td>Maximum weight (lb)</td>
<td>76.1</td>
<td>71.7</td>
</tr>
<tr>
<td>Floor space (sq. feet)</td>
<td>3.25</td>
<td>2.70</td>
</tr>
<tr>
<td>Typical power consumption (watts)</td>
<td>&lt; 415</td>
<td>&lt; 271</td>
</tr>
<tr>
<td>Maximum power consumption (watts)</td>
<td>750</td>
<td>580</td>
</tr>
<tr>
<td>AC voltage range (Volts)</td>
<td>100 to 127, 200 to 240</td>
<td>100 to 127, 200 to 240</td>
</tr>
<tr>
<td>AC frequency range (Hz)</td>
<td>47 to 63</td>
<td>47 to 63</td>
</tr>
<tr>
<td>Ampere ratings (A)</td>
<td>7 (100V to 127V), 3.5 (200V to 240V)</td>
<td>7 (100V to 127V), 3.5 (200V to 240V)</td>
</tr>
<tr>
<td>Mean time to repair (hours)</td>
<td>&lt; 1</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

---

### Warranty Coverage

Three (3) years parts replacement and 90 days software.

### Management

Through existing NetBackup Graphical User Interface.

### Protocol standards followed

IPMI 2.0, SMBIOS 2.5, SAS 1.0a, ACPI rev 3, IP RFC0791

### Safety and EMC standard compliance


---

### More Information

**Visit our website**

http://enterprise.symantec.com

**To speak with a Product Specialist in the U.S.**

Call toll-free 1 (800) 745 6054

**To speak with a Product Specialist outside the U.S.**

For specific country offices, please visit our website.

**Symantec World Headquarters**

350 Ellis St. | Mountain View, CA 94043 USA

1 (650) 527 8000 | 1 (800) 721 3934 | [www.symantec.com](http://www.symantec.com)

---

1. For more information, please refer to the NetBackup Clients and Agents data sheet.
2. When first storage shelf is added, the existing 4 TB usable capacity is dedicated to meta data.
3. Observed performance is based on 49 clients, 2 streams per client, 98 percent deduplication.