HP DG146BB976

HP 146GB SAS 10K Dual Port Drive DG146BB976 User Manual

Model: DG146BB976

1. PRODUCT OVERVIEW

The HP 146GB SAS 10K Dual Port Drive, model DG146BB976, is a high-performance 2.5-inch Small Form Factor (SFF) hard disk drive designed for enterprise server environments. Featuring a Serial Attached SCSI (SAS) interface and a rotational speed of 10,000 RPM, this drive provides reliable and fast data access for demanding applications. Its dual-port capability enhances data path redundancy and performance in compatible server systems. This manual provides essential information for the proper installation, operation, and maintenance of your HP SAS hard drive.

2. SAFETY INFORMATION

- Always handle the drive by its edges to avoid touching the circuit board or connectors.

- Ensure proper grounding to prevent electrostatic discharge (ESD) damage.

- Disconnect power from the server before installing or removing the drive.

- Do not expose the drive to moisture, extreme temperatures, or strong magnetic fields.

- Refer to your server's documentation for specific safety guidelines.

3. PACKAGE CONTENTS

- 1 x HP 146GB SAS 10K Dual Port Drive (Model: DG146BB976) with integrated 2.5-inch drive tray.

4. SETUP AND INSTALLATION

Follow these steps to properly install your HP SAS hard drive:

1. **Preparation:** Power down your server and disconnect all power cables. Open the server chassis according to the manufacturer's instructions.

2. **Locate Drive Bay:** Identify an available 2.5-inch hot-swap drive bay in your server.

3. **Insert Drive:** Carefully slide the HP SAS drive, with its integrated tray, into the empty drive bay until it clicks securely into place. Ensure the drive is fully seated in the connector.

4. **Secure Drive:** If your server requires additional securing mechanisms (e.g., screws or latches), engage them to hold the drive firmly.

5. **Close Chassis:** Close the server chassis and reconnect power cables.

6. **Power On:** Power on the server. The operating system or RAID controller should detect the new drive.

7. **Configuration:** Depending on your server's configuration, you may need to initialize, partition, and format the drive through the operating system or RAID controller utility. For RAID configurations, consult your RAID controller's documentation.

Image showing the HP 146GB SAS 10K Dual Port Drive, including its 2.5-inch form factor and integrated drive tray for server installation.

5. OPERATING INSTRUCTIONS

Once installed and configured, the HP 146GB SAS drive operates as a standard storage device within your server environment.

- **Data Storage:** Use the drive for storing operating systems, applications, and data.

- **RAID Arrays:** This drive is suitable for use in RAID (Redundant Array of Independent Disks) configurations to enhance performance, data redundancy, or both. Consult your RAID controller's manual for array creation

and management.

- **Dual Port Functionality:** The dual-port SAS interface provides redundant data paths, which can improve reliability and performance in environments with compatible dual-port SAS controllers.

6. MAINTENANCE

- **Airflow:** Ensure adequate airflow within the server chassis to prevent overheating, which can degrade drive performance and lifespan.
- **Temperature:** Operate the server within its recommended ambient temperature range.
- **Firmware:** Periodically check the HP support website for firmware updates for your drive model and server. Apply updates as recommended.
- **Data Backup:** Regularly back up critical data stored on the drive to prevent data loss in case of drive failure or other unforeseen events.

7. TROUBLESHOOTING

- **Drive Not Detected:**
  - Verify the drive is fully seated in the drive bay connector.
  - Check that the server is powered on and the SAS controller is functioning correctly.
  - Consult your server's documentation for drive detection procedures.

- **Performance Issues:**
  - Ensure the drive is properly configured within your operating system or RAID array.
  - Check for other system bottlenecks (e.g., CPU, RAM, network).
  - Monitor drive health using appropriate diagnostic tools.

- **Unusual Noises:**
  - If the drive emits unusual clicking, grinding, or excessive vibration, power down the server immediately and contact support. This may indicate a mechanical failure.

8. SPECIFICATIONS

Hard Drive Capacity:	146 GB
Interface:	SAS (Serial Attached SCSI)
Rotational Speed:	10,000 RPM
Form Factor:	2.5 Inches (Small Form Factor)
Ports:	Dual Port
Item Model Number:	DG146BB976
Brand:	HP
Manufacturer:	HP
Item Weight:	Approximately 3.2 ounces (90.7 grams)
Package Dimensions:	Approximately 6.46 x 5.04 x 2.52 inches (16.4 x 12.8 x 6.4 cm)
Date First Available:	January 15, 2009

Compatible Devices:	Desktop (Primarily designed for server environments, but compatible with systems supporting 2.5-inch SAS drives)
Installation Type:	Internal (with tray for external hot-swap bay access)

9. Warranty and Support

This product is identified as an *"Off-Lease"* item. *"Off-Lease"* products are typically used items that have been returned from a business lease, inspected, cleaned, and repackaged by a leasing agent or third-party partner.

- **Warranty:** Off-lease products generally carry limited warranties provided by the original leasing agent or their third-party refurbisher, not directly by the original manufacturer (HP). The specific terms and duration of the warranty should be confirmed with your seller at the time of purchase.

- **Technical Support:** For technical issues or warranty claims, please contact the vendor or reseller from whom you purchased this drive. They will be able to provide information regarding the specific warranty coverage and support options available for off-lease products. HP's standard manufacturer warranty may not apply to off-lease items.