Hewlett-Packard

Non-Pluggable SCSI Hard Drive Compatibility

This document provides current compatibility information between HP SCSI drives and HP servers. Basic drive characteristics are provided to help understand any compatibility limitations.

The following guidelines apply when selecting drives for HP systems:

- Drives for Non-Pluggable systems are mounted in 3.5-inch internal drive bays and require appropriate terminated internal SCSI cabling.

- Non-Pluggable systems and some Hot-Pluggable systems support drives in 5.25-inch removable media drive bays with appropriate mounting hardware. These drives require appropriate terminated internal SCSI cabling.

- The compatibility table in this document represents tested and supported configurations for these drives. Using HP hard drives in unsupported configurations will void the warranty and could damage the drive and/or cause data loss.

- Ultra2, Ultra3 and Ultra320 drives can be mixed on the same SCSI bus. Wide Ultra drives should not be used on the same SCSI bus as Ultra2, Ultra3 or Ultra320 devices.

- Only supported cable configurations should be used. Attempting to use previous version SCSI cables in Ultra2, Ultra3 or Ultra320 systems can result in data loss.

A Word About HP Disk Drives

The high performance and reliability requirements of server and workstation environments mean that selecting the right drives for your system is critical. Hewlett-Packard has developed one of the industry's most rigorous programs for qualification, continuous testing, and system integration to ensure that our storage customers get the best drives available.

- **Fault Prediction**—Drive firmware has been enhanced to enable monitoring software to detect conditions in the drive parameters that are precursors to failure. If problems develop in a HP drive, the Smart Array controller lets you know in advance so you can replace the drive under the HP Pre-Failure Warranty.* Additionally, Wide-Ultra, Ultra2, Ultra3 and Ultra320 SCSI drives now support SMART predictive failure reporting. SMART Pre-Failure reporting works in both array and nonarray controller server environments. SMART predictive failure reporting is a complement to the Pre-Failure notification provided by HP Smart Array controllers and HP Insight Manager software. Wide-Ultra, Ultra2, Ultra3 and Ultra320 SCSI drives that experience SMART trips are also covered under the HP Pre-Failure Warranty.

- **Quality**—HP drives undergo an intense qualification process that eliminates data integrity problems, firmware and O/S incompatibilities, and other causes of data corruption or premature failure.

- **Performance**—Only those drives whose performance is suitable for a server or workstation environment are selected through HP's qualification process and are considered "best in class."

- **Integration**—The integration of hard drives in HP systems means that cables, SCSI ID settings, termination, and firmware are right for your server or storage system.

*Requires installation in a HP server using HP Insight Manager2.1 or later and a HP Smart Array controller.

HP Non-Pluggable SCSI Hard Drive Compatibility Table

Drive Information   **Non-Pluggable Systems**

Option Kits (Spares Kit) — **Internal Drive Models** — **Supported Drive Models**

Option Kits (Spares Kit)	Capacity (GB)	Interface*	Form Factor**	Connector***	ProLiant DL320	ProLiant DL320 G2/G3	ProLiant DL145	ProLiant ML350	ProLiant ML350/G4	ProLiant ML330 G2/G3	ProLiant ML310 G2	ProLiant ML150	ProLiant ML110 G2	Supported Drive Models
356990-B21+ (357915-001)	146.8	U320	1"	68	2	2	X	2	X	2	X	X	X	BD14698573, BD1469827B, BD14697B58
332751-B21+ (332934-001)	72.8	U320	1"	68	2	2	X	2	X	2	X	X	X	BD07296B44, BD0729827A BD07298572, BD07297B57
357012-B2± (357913-001)	36.4	U320	1"	68	2	2	X	2	X	2	X	X	X	BF03698782, BF03697B5A, BF03698287 BF03698578
271832-B21+ (279785-001)	36.4	U320	1"	68	2	2	X	2	X	2	X	X	X	BD03695A27, BD03695CC8, BD03697633
176497-B21+ (177987-001)	36.4	U3	1"	68	1	X		1		1				BD036734A5, BD036735C8, BD03673625, BD036745A4, BD03674555
142674-B21+ (152191-001)	18.2	U3	1"	68	1	X		1		1				BD01872377, BD01872A6A,BD018734A4, BD018735C7.BD01873624, BD018745A3 BD01874554

+ Contains 10,000 RPM drives.

±Contains 15,000 RPM drives.

*Interface
   U320 = Ultra320
   U3 = Ultra3

**Form Factor
   1" = standard third-height (1-inch) form factor drive

***Connector - SCSI signal connector on drive
   68 = 68-pin, Female, SCSI-3 connector

****Compatibility Notes:
  Blank = Not Compatible
  X = optional Compatible unconditionally..
  1 = Requires Wide Ultra3 SCSI controller and/or cabling to use Wide Ultra3 bus speeds.
     Some models may not support these options.

  2 = Requires optional Ultra320 SCSI controller to use Wide Ultra320 bus speeds.
     Some models may not support these options.

May 2005