

Overview

HP StorageWorks DAT 72 tape drive for ProLiant and AlphaServer systems	Internal (DAT 72i), Worldwide (Carbon)	Q1525A
	External (DAT 72e), NA (Carbon)	Q1527A
	External (DAT 72e), Intl (Carbon)	Q1528A
	3U Rackmount Kit, Worldwide (No drives included. Accommodates up to 4 internal DDS drives)	274338-B21
HP StorageWorks DAT 72 tape drive for Open Connect	Internal (DAT 72i), Worldwide (Carbon)	Q1522A
	External (DAT 72e), Worldwide (Carbon)	Q1523A
	Array Module (DAT 72m) – Field Integrated (Flint)	Q1524A
	Array Module (DAT 72m) – Factory Integrated (Flint)	Q1524A-OD1
NOTE: Array modules fit in to HP Tape Array 5300 (C7508A or C7508AZ for factory fitted).		
HP StorageWorks DAT 72 tape drive, Trade Ready (No markings on front panel), Worldwide (Flint. No markings on front panel, no learning products, software, cables)		Q1526A
Product specifications apply to all branded HP ProLiant, AlphaServers and Open Connect variants with the exception of front panel colors, which vary.		
The Trade Ready drive has no markings on the front panel, no learning products, no software, and a two year warranty and is sold into the hardware integrator market.		
HBAs for open connect variants see table on pages 8 - 9 or go to http://www.hp.com/go/connect		

Feature List

- 36 GB native capacity on a single tape, 72 GB at 2:1 compression
- 3 MB/s data transfer rate (native), 6 MB/s at 2:1 compression
- Internal, external, rackmount and Trade Ready configurations

Product Description

The HP StorageWorks DAT 72 tape drive is the fifth generation of HP's popular DDS tape format, delivering a capacity of 72 GB * on a single HP DDS data cartridge (C8010A). Reinforcing HP's leadership position in the tape market, it builds on the success of four previous generations of DDS drive technology providing unprecedented levels of capacity, reliability and cost of ownership. The StorageWorks DAT 72 tape drive is the ideal choice for small and medium businesses, remote offices or workgroups.

* Assuming 2:1 compression ratio.

Customer benefits include

- High capacity storage – typically 72 GB on a single cartridge (2:1 compression)
- Fast performance – allows backup at a rate of 21.6 GB/hour (2:1 compression)
- Investment protection – The drive is read and write compatible with both DDS-3 and DDS-4 media enabling customers to restore older data if required and protect their existing investment in media.
- Very high reliability of both the tape drive and media
- Very low cost media
- OBDR - quick, reliable and simply restores the entire system just by inserting the most recent backup tape and pushing one button on the tape drive
- Branded variants (internal, external and array modules) include a full single user copy of TapeWare software with disaster recovery option



Product Highlights

Key Features

- 36 GB (native), 72 GB (2:1 compression) capacity
- 3 MB/s (native), 6 MB/s (2:1 compression) transfer rate
- Internal, external, array module and Trade Ready configurations
- Universal implementation into HP ProLiant and AlphaServer systems
- Broad ISV connectivity (HP OpenView Storage Data Protector, Yosemite TapeWare, VERITAS Backup Exec, CA ARCserve, Tivoli TSM, Legato Networker)
- Qualified on Microsoft® Windows® NT® 4.0, Windows 2000 and Windows Server 2003 (.NET), many versions of LINUX, Novell NetWare, Tru64 UNIX, HP-UX and SUN Solaris
- Lowest media price of any tape technology
- Supports HP's One-Button Disaster Recovery (OBDR) Solution
- Full single client copy of TapeWare with disaster recovery option included with internal, external and array module variants

DAT 72 (Fifth generation DDS Tape Technology) Fifth generation tape drive technology uses the helical scan format. Data is written and recorded in groups, where each group is a logical collection of data records physically recorded as 22 frames, each frame containing 2 tracks. The DAT 72 format is a semi-open format and data written on any HP StorageWorks DAT 72 tape drive may be interchanged directly with DAT 72 tape drives from other vendors.

Backwards Compatibility

DAT 72 tape drives are fully read and write backwards compatible with all DDS-3 and DDS-4 products from all licensed manufacturers.

High Reliability

HP's DDS tape technology has proven itself during more than 12 years of use as one of the most reliable tape technologies on the market today. DAT 72 builds on the strengths and successes of previous generations of DDS drives. The HP StorageWorks DAT 72 tape drive has a mean time between failure (MTBF) rating of 400,000 hours at a 12% percent duty cycle, making it an ideal choice for small and medium businesses.

Compression

The HP StorageWorks DAT 72 tape drive as per previous generations of DDS uses the 'DCLZ' data compression algorithm. Data compression is host selectable with the default that compression is turned on.

Compatibility Testing

The HP StorageWorks DAT 72 tape drive for ProLiant is fully supported and compatible with HP ProLiant servers, AlphaServers and host bus adapters. This tape drive is thoroughly tested with other major brands of server, leading software and operating systems. The compatibility matrix shown below gives a more comprehensive listing of all hardware and software supported.

Rackmount

All HP DDS tape products have variants that enable the drive to be fitted into racks.

For compatibility with ProLiant and AlphaServer systems use 3U rackmount kit (P/N 274338-B21) and internal drive (P/N Q1525A).

For compatibility with HP UNIX systems and to be fitted into HP Tape Array 5300 (P/N C7508A) use Array Module (P/N Q1524. Order option #OD1 for Factory fitted option).

HP DDS Storage Media

HP's test program for HP DAT 72 media is probably the most thorough and comprehensive in the industry. HP data cartridges must satisfy an exhaustive battery of additional tests that relate directly to real life situations, where real data and real businesses are at stake. Over 1 million test hours on media and drives per year ensure that HP data cartridges will always offer maximum reliability even in the most extreme conditions. HP recommends that customers always use HP branded media to ensure stress free backup and complete peace of mind.

Product Highlights

Management	<p>HP StorageWorks DDS tape products are supported, by HP StorageWorks Library and Tape Tools (L&TT) version 3.1 onwards. This tool is intended to help in the installation and maintenance of HP tape drives and devices and also includes:</p> <ul style="list-style-type: none"> • Diagnostic tools for tape drive and tape automation devices, designed to simplify troubleshooting • Multiple options for retrieving firmware information and updating it • Instructions and download of L&TT v3.1 are available at: http://www.hp.com/country/us/eng/software_drivers.htm (search for DAT 72) 																				
One Button Disaster Recovery (OBDR)	<p>This feature puts the tape drive into a special disaster recovery mode that enables it to act as a bootable CD to restore the operating system and reboot the server or workstation.</p>																				
Why buy HP StorageWorks DAT 72?	<p>DDS has the highest installed base of any technology in the market with over 9 million drives installed.</p> <ul style="list-style-type: none"> • It has excellent reliability >400000 hours MTBF at 12% duty cycle. • High capacity (72 GB) • A semi-open industry standard – DAT 72 format – with read/write compatibility with media written by competitor's drives • Investment protection – read and write compatibility with DDS-3 and DDS-4 • Lowest cost media of any tape technology • Supports HP's One-Button Disaster Recovery (OBDR) solution - A simple, fast, hassle-free way to return your network to exactly the way it was at the time of your last backup • Full single user copy of TapeWare included in the box 																				
Warranty	<p>3-year, next-business-day unit exchange (not available in some countries).</p>																				
Service & Warranty Support	<p>Additional warranty protection and/or Installation packages can be purchased.</p>																				
Software Product Services	<p>Media and documentation updates</p>																				
Hardware Product Services	<p>The information below covers all DAT 72 products. 'A' signifies shrink-wrap, 'E' signifies electronic</p> <table border="1"> <thead> <tr> <th data-bbox="503 1207 1331 1249">Service</th> <th data-bbox="1331 1207 1503 1249">Product Number</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="503 1249 1503 1281">Blue Service Pack options</td> </tr> <tr> <td data-bbox="503 1281 1331 1312"><i>Onsite, next day, 3-year</i></td> <td data-bbox="1331 1281 1503 1312">H3155A/E</td> </tr> <tr> <td data-bbox="503 1312 1331 1354"><i>Onsite, 4 hour, 13x5, 3-year</i></td> <td data-bbox="1331 1312 1503 1354">H4616A/E</td> </tr> <tr> <td data-bbox="503 1354 1331 1396"><i>Onsite, 4 hour, 24x7, 3-year</i></td> <td data-bbox="1331 1354 1503 1396">U2068A/E</td> </tr> <tr> <td colspan="2" data-bbox="503 1396 1503 1428">Red Service pack options</td> </tr> <tr> <td data-bbox="503 1428 1331 1470"><i>Onsite, next day, 3-year</i></td> <td data-bbox="1331 1428 1503 1470">174403-002</td> </tr> <tr> <td data-bbox="503 1470 1331 1512"><i>Onsite, 4 hour, 9x5, 3-year</i></td> <td data-bbox="1331 1470 1503 1512">174406-002</td> </tr> <tr> <td data-bbox="503 1512 1331 1554"><i>Onsite, 4 hour, 24x7, 3-year</i></td> <td data-bbox="1331 1512 1503 1554">174409-002</td> </tr> <tr> <td data-bbox="503 1554 1331 1589"><i>Onsite, installation</i></td> <td data-bbox="1331 1554 1503 1589">174412-002</td> </tr> </tbody> </table>	Service	Product Number	Blue Service Pack options		<i>Onsite, next day, 3-year</i>	H3155A/E	<i>Onsite, 4 hour, 13x5, 3-year</i>	H4616A/E	<i>Onsite, 4 hour, 24x7, 3-year</i>	U2068A/E	Red Service pack options		<i>Onsite, next day, 3-year</i>	174403-002	<i>Onsite, 4 hour, 9x5, 3-year</i>	174406-002	<i>Onsite, 4 hour, 24x7, 3-year</i>	174409-002	<i>Onsite, installation</i>	174412-002
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Family Comparison

	DAT 72	DDS-4
Announce Date	April 2003	1999
Capacity (native)	36 GB	20 GB
SCSI Interface	Wide Ultra SCSI LVD	Wide Ultra SCSI LVD
Buffer	8 MB with full error protection (SDRAM)	4 MB (SDRAM)
Firmware Upgradeable	Yes with LTT	Yes with LTT
Maximum Drives per bus	15	15
MTBF	400,000 hours @ 12% duty cycle	400,000 hours @ 12% duty cycle
Transfer Rate (native)	3 MB/s	3 MB/s

Server and Tape Compatibility

SERVER AND TAPE COMPATIBILITY FOR PROLIANT

(For open connect, go to: <http://www.hp.com/go/connect>)

		E = external, R=rack-mount, I=Internal, H=Hot Plug, X = All variants (external, internal, rack-mount and hot plug)	Part Number
HP ProLiant Servers	DL 320 (G2)	R, E	
	DL 360 (G1/G2)	R, E	
	DL 380 (G1/G2/G3)	R, E, H	
	DL 580	R, E, H	
	DL 760	R, E, H	
	ML 310 (G2, G3)	X	
	ML 330 (G2, G3)	X	
	ML 350 (G1/G2/G3)	X	
	ML 370 (G1/G2/G3)	X	
	ML 530 (G1/G2)	X	
	ML 570 (G1/G2)	X	
	ML 750	R, E, I	
	8 way, 4U ProLiant DL 740	R, E, H	
	DL380 Generation 2 Packaged Cluster	R, E, H	
HP ProLiant SCSI HBA's	Dual Channel Ultra3	X	129803-B21, -291
	2-Ch Ultra-320 SCSI HBA All	X	268351-B21
	Single Channel 64-bit Wide Ultra3	X	154457-B21, -291
3rd Party IA-32 SCSI HBA's	Adaptec 29320D	X	
	Adaptec 29160*	X	C7474A
	Adaptec 2940	X	
	LSI 22320	X	
	LSI 22915	X	
	LSI 22895	X	
* NOTE: Any 3rd party server will be supported when the Adaptec 29160 HBA is used.			

Server and Tape Compatibility

SERVER AND TAPE COMPATIBILITY FOR PROLIANT *(continued)*

		E = external, R=rack-mount, I=Internal, H=Hot Plug, X = All variants (external, internal, rack-mount and Hot Plug)	Part Number
HP AlphaServers	DS10 (NOTE 1)	R, H	
	DS10L (NOTE 1)	R	
	DS20L (NOTE 1)	R	
	DS20E (NOTE 1)	R, H	
	DS25 (NOTE 1)	R	
	ES40 (NOTE 1)	X	
	ES45 (NOTE 1)	X	
	GS80/160/320 (NOTE 1)	R	
	GS1280 (Marvel) (NOTE 1)	R	
NOTE 1: AlphaServers will be supported 30-90 days after launch. Internal units must be installed using rackmount kit.			
Alpha SCSI HBA's	32-bit LVD Single Channel SCSI	X	3X-KZPCA-AA
	PCI Combo Ultra2 LVD SCSI Adapter	X	3X-DEPVZ-AA
	32-bit Single Channel	X	30-56041-01
	64-bit Dual Channel Ultra 3 LVD SCSI Adapter	X	3X-KZPEA-DB
	Combo SCSI/Video/Ethernet	X	3X-DEPVZ-AA
HP-UX SCSI HBA's	LSI Ultra2	X	C5149A, C5150A, C5838A
	LSI Ultra160	X	C6828A, C6829A
SUN Solaris SCSI HBA's	Qlogic/Sun Ultra160	X	
	LSI Ultra160 - ITI6200U3LP-S	X	
	LSI Ultra2 - ITI6100U2-VS	X	

Server and Tape Compatibility

SERVER AND TAPE COMPATIBILITY FOR PROLIANT *(continued)*

		Internal, External & Hot plug = X; Hot plug only = H	Part Number
Smart Array Controllers	Integrated Smart Array 5i Controller on DL380 G2/G3	H	N/A
	5i & 5i+	X	226593-B21(5i)
	5302/128	H	158939-B21
	5312	H	
	5304/256	H	
	532	H	225338-B21
	5304/128	H	158939-B21
	5302/64	H	124992-B21
	5302/32	H	166207-B21
Smart Array Enclosures	StorageWorks Enclosure model 4314 rack	H	
	StorageWorks Enclosure model 4354 rack (dual-bus)	H	
Dell Servers (using LSI or Adaptec HBA Controllers)	Poweredge 1600	X	
	Poweredge 2600	X	
	Poweredge 4600	X	
Racks	HP ProLiant 9000 Series Racks	X	
	HP ProLiant 10000 Series Racks	X	
	Alpha M-Series Racks*	X	
	*Requires the installation of an Alpha 3U Rail Kit.		
Rackmount Kits for HP ProLiant and AlphaServers (3U)	3U Rackmount Kit	X (2)	274338-B21
* Requires the installation of an LVD Cable Kit to have each drive supported on a separate bus.			

Server and Tape Compatibility

SERVER AND TAPE COMPATIBILITY FOR PROLIANT *(continued)*

		Internal, External & Hot plug = X; Hot plug only = H	Part Number
Cable/Rail Kits	68-pin male to 50-pin male ribbon cable adapter	I	C7423A
	Internal SCSI cable (4 connector, 68-way, terminated LVD/SE Ultra2 quality conductor for use with HP TA5300)	R	C7424A
	LVD Cable Kit, 68-Pin HD/VHDCI	X	168048-B21
	LVD Cable Kit, 68-Pin HD/68-Pin HD	X	242381-B21
	External 68-Pin HD/VHDCI, 12ft	X	341177-B21
	External 68-Pin HD/68-Pin HD, 5m	X	328215-001
	External 68-Pin HD/68-Pin HD, 10m	X	328215-002
	3U Rackmount kit, All	X	274338-B21
	3U Alpha Rail Kit (254795-001) for installing 3U Rackmount Kit in Alpha M-Series rack or HP Rack System/E rack	X	280571-001 3R-A3804-AA
	Dell rail kit for PowerEdge servers 2100 and 2200	X	C5731A
	Dell rail kit for PowerEdge servers 2300, 4100, 4200 and 6100	X	C5732A

SOFTWARE

	Operating System	Version
Operating Systems	Operating System	Version
	Microsoft Windows NT 4.0	X
	Microsoft Windows 2000	X
	Microsoft Windows Server 2003	X
	Novell NetWare	v.5.1/v.6.0
	Tru64 UNIX (NOTE 1)	v.5.1x
	SCO/Caldera OpenServer (NOTE 1)	v.5.0.6
	SCO/Caldera OpenUNIX (NOTE 1)	v.8.0
	Linux Red Hat Advanced Server	v.2.1
	Linux Red Hat Professional	v.8.0
	Linux SuSE SLES	v.8.0
	Linux SuSE Professional	v.8.0
	United Linux	v.1.0
	SUN Solaris (sparc)	v.8.0/v.9.0
	HP - UX	v.10.20/v.11.x
	IBM - AIX	v.5.1
Open VMS (NOTE 1)	v.7.2-2/v.7.3-1	

NOTE 1: Support 30-90 days after drive announces.

Server and Tape Compatibility

SOFTWARE *(continued)*

	Backup Applications and Test Software	Version
ISV Backup Applications	VERITAS Backup Exec for Windows NT/Windows 2000	v.9.0
	VERITAS Backup Exec for Windows Server 2003	v.9.0
	VERITAS Backup Exec for NetWare	v.9.0
	CA ARCserve 2000 for Windows NT/Windows 2000	v.9.0
	CA ARCserve 2000 for Windows Server 2003 (.NET)	v.9.0
	CA ARCserveIT for NetWare	v.9.0
	CA ARCserve for Linux	v.9.0
	Dantz Retrospect for Windows NT/2000/Server 2003/HP-UX	v.6.0
	HP OpenView Storage Data Protector for Windows NT/Windows 2000/Server 2003	v.5.0
	HP StorageWorks Library and Tape Tools (L&TT)	v.3.1
	Legato Networker (All platforms)	v.6.1.3
	Yosemite TapeWare for Windows NT/2000/Server 2003/Linux	v.6.3 SP3B/C

NOTE 1: Support 30-90 days after drive announces.

Configuration Information

DAT 72 TAPE DRIVES

Select one:

Model Number	Model Description	Part Number
HP StorageWorks DAT 72i Internal Tape Drive	Contains Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 3.5 to 5.25 inch conversion kit, ProLiant mounting kit, power extender cable.	Q1522A
HP StorageWorks DAT 72e External Tape Drive	Contains Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 68 pin VHDCI to 68 pin high density multi-mode SCSI cable 2.5m, LVD/SE SCSI multi-mode terminator, power cord	Q1523A
HP StorageWorks DAT 72m Field integrated	Contains Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 3.5 to 5.25- inch conversion kit, ProLiant mounting kit.	Q1524A
HP StorageWorks DAT 72m Factory integrated	Contains Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 3.5 to 5.25- inch conversion kit, ProLiant mounting kit.	Q1524A#OD1
HP DAT 72 Trade Ready	Contains Getting Started Guide, Trade Ready Accessory Pack	Q1526A
HP StorageWorks DAT 72, Internal for ProLiant	Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 3.5 to 5.25- inch conversion kit, ProLiant mounting kit, power extender cable.	Q1525A
HP StorageWorks DAT 72, External for ProLiant	Installation Guide, HP StorageWorks CD, TapeWare backup software, warranty registration card, one HP DAT 72 data cartridge (72 GB*), one HP DDS cleaning cartridge, 68 pin VHDCI to 68 pin high density multimode SCSI cable 2.5m, LVD/SE SCSI multi-mode terminator, power cord	Q1527A/Q1528A (US/International)

Configuration Information

RELATED OPTIONS

Media	HP DAT 72* data cartridge* (recommended)	C8010A
	HP DDS-4 data cartridge	C5718A
	HP DDS-3 data cartridge	C5708A
	HP DDS Universal cleaning cartridge*	C5709A
	Media available for purchase on-line: http://www.hp.com/products1/storage/products/media/index.htm	

Rackmount Tape Options and Cable Kit	HP Tape Array 5300 (Purchase HP Array Module with TA5300)	C7508A
	3U Rackmount Kit, All	274338-B21
	Please refer to Rackmount Tape Drive Kits* QuickSpec for further information	
	LVD Cable Kit, 68-pin HD/VHDCI (Internal and External Cables)	168048-B21
	LVD Cable Kit, 68-pin HD/68-pin HD (Internal and External Cables)	242381-B21
	68-pin HD/VHDCI, 12 ft/3.66 m (External Cable only)	341177-B21
	68-pin HD/VHDCI, 16.40 ft/5 m (External Cable only)	328215-001
	68-pin HD/VHDCI, 12 ft/3.66 m (External Cable only)	328215-002
	68-pin male to 50-pin male ribbon cable adapter	C7423A
	Internal SCSI cable (4 connector, 68-way, terminated LVD/SE Ultra2 quality conductor for use with HP Tape Array 5300)	C7424A

* Customers and partners can order additional DDS and DAT 72 media (Part Number C8010A, C5718A, C5708A) and DDS cleaning cartridges (Part Number C5709A) as HP third-party products through traditional Major Account Direct, Partner Direct, and Compaq Direct processes.

Technical Specifications

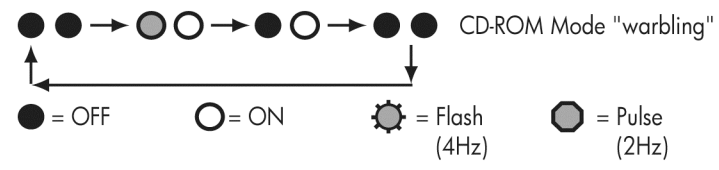
Dimensions (HxWxD)	Physical		
	HP StorageWorks DAT 72, Internal	1.6 x 5.8 x 6.4 in (4.1 x14.7 x 16.2 cm)	
	HP StorageWorks DAT 72, External	3.7 x 4.6 x 8.7 in (9.5 x 11.6 x 22.0 cm)	
	HP StorageWorks DAT 72, Tape Module	1.6 x 6.5 x 11.2 in (4.1 x16.5 x 28.4 cm)	
	HP DAT 72, Trade Ready	1.6 x 5.8 x 6.4 in (4.1 x14.7 x 16.2 cm)	
Weight	Shipping		
	HP StorageWorks DAT 72, Internal	5.9 x 9.0 x 9.5 in (15.0 x 22.9 x 24.1 cm)	
	HP StorageWorks DAT 72, External	11.4 x 10.2 x 14.2 in (29.0 x 25.9 x 36.1 cm)	
	HP StorageWorks DAT 72, Tape Module	10.6 x 13.4 x 18.1 in (26.9 x 34.0 x 45.9 cm)	
	HP DAT 72, Trade Ready	5.5 x 9.0 x 9.1 in (14 x 22.5 x 23.1 cm)	
UPC Codes	Out of box		
	HP StorageWorks DAT 72, Internal	2.2lb (1Kg)	
	HP StorageWorks DAT 72, External	4.6lb (2.1Kg)	
	HP StorageWorks DAT 72, Tape Module	3.3lb (1.5Kg)	
	HP DAT 72, Trade Ready	2.2lb (1Kg)	
	Shipping		
	HP StorageWorks DAT 72, Internal	5.9lb (2.7Kg)	
	HP StorageWorks DAT 72, External	8.8lb (4Kg)	
	HP StorageWorks DAT 72, Tape Module	8.8lb (4Kg)	
	HP DAT 72, Trade Ready	2.9lb (1.3Kg)	
	UPC Codes	HP StorageWorks DAT 72 for ProLiant and AlphaServer systems), Internal (Q1525A)	UPC – 808736518567
		HP StorageWorks DAT 72 for ProLiant and AlphaServer Systems, External (Q1527A) North America	UPC – 808736518581
		(Q1528A) International	UPC – 808736518598
		Trade Ready	UPC – 808736518574
		HP StorageWorks DAT 72, Internal (Q1522A)	AB2 – 808736518369
ABA – 808736518376			
ABB – 808736518383			
ABJ – 808736518390			
ARS – 808736518406			
HP StorageWorks DAT 72, External (Q1523A)		A2S – 808736518413	
		AB2 – 808736518420	
		ABA – 808736518437	
		ABB – 808736518444	
		ABG – 808736518451	
		ABJ – 808736518468	
	ABU – 808736518475		
	ACD – 808736518482		
	ACE – 808736518499		
	ACJ – 808736518505		
AKY – 808736518512			
ARR – 808736518529			
ARS – 808736518539			

Technical Specifications

UPC Codes (continued)	HP StorageWorks DAT 72, Array Module (Q1524A)	UPC – 808736518550
	HP StorageWorks DAT 72, Array Module, Factory-Racked (Q1524A#OD1)	UPC – 808736518543

Cables Supported	Cables	
	HP Tape Array 5300 (Purchase HP Array Module with TA5300)	C7508A
	LVD Cable Kit, 68-pin HD/VHDCI	168048-B21 (Internal and External Cables)
	LVD Cable Kit, 68-pin HD/68-pin HD	242381-B21 (Internal and External Cables)
	68-pin HD/VHDCI, 12 ft/3.66 m	341177-B21 (External Cable only)
	68-pin HD/VHDCI, 16.40 ft/5 m	328215-001 (External Cable only)
	68-pin HD/VHDCI, 12 ft/3.66 m	328215-002 (External Cable only)
	68-pin male to 50-pin male ribbon cable adapter	C7423A
	Internal SCSI cable (4 connector, 68-way, terminated LVD/SE Ultra2 quality conductor for use with HP TA5300)	C7424A
	External drive options contain (1) 2.5m HD to VHDI External Cable	C7434A

- | | | |
|------|-------|---|
| LEFT | RIGHT | |
| ● | ● | No Power |
| ● | ● | Cartridge Loaded, No Activity |
| ⚙ | ● | Cartridge Loaded, Activity |
| ⚙ | ● | Loading/Unloading/Ejecting/Power-On |
| ● | ○ | Self Test Fail |
| ● | ⊗ | No Cartridge, Caution (cleaning required) |
| ● | ⊗ | Cartridge Loaded, Caution (cleaning required) |
| ⚙ | ⊗ | Cartridge Loaded, Drive Active, Caution (cleaning required) |
| ⚙ | ⊗ | Cartridge Loading/Unloading, Caution (cleaning required) |



Technical Specifications

Capacity	Native	36 GB
	Compressed	72 GB, assuming 2:1 ratio (data dependant)
Drive Type	4mm cartridge tape, DAT 72 format.	
Transfer Rates	Native (maximum)	10.8 GB/hour
	2:1 Compression (maximum)	21.6 GB/hour
Interface	Wide Ultra3 SCSI (LVD)	
Internal buffer	16 Mbytes	
Tape Format	Recording Method	Helical Scan, 4mm
	Recording Format	ANSI/ISO/ECMA, DDS-3, DDS-4, DAT 72 (5 th Generation DDS) Media recognition System Cartridges
Media	DAT 72 media – 170m, 4mm tape, Metal Particle (MP++++) formulation	
Standards Compliance	cCSAus; TÜV; FCC; CE; BSMI; RRL; C-Tick(NOM, VCCI & GOSH for 'e' variant)	
Data Compression	Data-Compression-Lempel-Ziv (DCLZ)	
Error Detection/Correction	Reed Solomon	
Sustained Transfer Rate	3 MB/s (native) 6 MB/s (compressed, 2:1) (Typically, users will be able to compress data at a 2 to 1 ratio; however, this depends on the data itself.)	
Burst Transfer Rate	6 MB/s maximum asynchronous, 40 MB/s maximum synchronous	
Search Speed	50 seconds average file access time using a DDS-4 data cartridge	
Maximum Number of Drives	Max 15 drives per Ultra3 SCSI controller however performance will be impaired. In order to achieve performance expectations it is strongly recommended that no more than one drive is connected to the SCSI bus.	
Reliability Features	MTBF	400,000 hours at 12% Duty Cycle
Temperature Range	Operating	41° to 104° F (5° to 40°C)
	Storage	-40° to 158° F (-40° to 70°C)
Relative Humidity (non-condensing)	Operating	20% to 80%
Power Requirement (Internal drive) +5V DC, 0.5A; +12V DC, 0.55A typical; +5V DC, 0.9A + 12V DC, 1.5A peak (<1 sec)		
Power Requirement (External drive)	100 to 240VAC 0.5A Auto-ranging 50-60Hz (on external units), +5VDC 0.5A, +12VDC 0.55A (typical)	

Technical Specifications

Power Requirement (Tape Module) 100-240V, 2.0A max, 50-60Hz, using Tape Array 5300

Power Consumption

- Minimum 3.4W (idle)
- Typical 7.1W
- Maximum 22.5W (load) for <1 sec

Termination No terminator is required for internal model (assumes use of terminated cable). The external model requires termination (terminator included with product)

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