



# HP Ultrium Tape Drives Sales and Positioning Guide



**HP Ultrium tape drives** are designed to expand HP's range of midrange-to-enterprise storage solutions by offering outstanding value in industry-standard LTO technology. Servers with 50GB-200GB of total disk storage can benefit from the superior value-priced, reliable, high capacity tape backup device. HP leverages the unprecedented reliability of the Ultrium format to open up the robustness and reliability of LTO technology to customers that have previously been limited to only DLT products.

## When should the HP Surestore Ultrium drive be included in a backup solution?

- Any customer with **up to 200GB** of data to protect
- Any customer who needs to backup **Mission-Critical** data.
- For a customer who requires high availability of data and reliability.
- Any company that has a data growth path, requires a planned drive and automation roadmap.
- As an upgrade from current DLT, 8mm, or AIT drives
- Use Ultrium 230 family when a customer needs super fast throughput (108GB/hour)
- Use Ultrium 215 family when a customer needs lower cost and does not need super fast throughput (54GB/hour)
- For higher capacity or tape automation, the HP Surestore library family is available

## The HP Surestore Ultrium includes:

- HP Surestore Ultrium Drive
- Full function TapeWare backup application software CD
- HP Ultrium 200GB data cartridge
- HP Ultrium cleaning cartridge
- Installation instructions
- HP Library & TapeTools CD

**External also includes:** 68-pin HD SCSI cable and power cable

**Internal also includes:** HP Netserver tray, Compaq Rail-Kit & Screw Pack

## Why Ultrium?

HP along with IBM and Seagate has created a next generation open tape technology to meet the storage demands for today and tomorrow.

### Five key elements

- **Capacity** -- 100GB native, 200GB compressed
- **Performance** – 108GB per hour (Ultrium 230 family), 54GB per hour (Ultrium 215 family)
- **Compatibility** – Read/Write compatible with other Ultrium certified tape drives and broad connectivity
- **Scalable** – from standalone to high end libraries!
- **Reliability enhancements** – See next column

## Reliability Enhancements:

- Fail-safe leader capture mechanism
- Internal active head cleaner
- 100,000 cycle load life
- Robust error correction (ECC) scheme
- Internal head cleaner
- Dual (redundant) servo heads
- Simplified tape path
- Proven softload mechanism design
- Designed for automation

## HP Surestore Ultrium Selling Points:

- Fully supports HP one-button disaster recovery (OBDR)
- 215 family **half-height** form factor fits into servers with only half-height enclosures
- **Strong roadmap** protects user investment
- **Data rate matching (ATS)** and **dual mode compression** for optimum throughput
- Utilizes industry-leading, **open standard** Ultrium tape technology.
- Ready supply of **industry standard media**
- HP Library and TapeTools compatibility
- Complete solution in the box
- HP System matching warranty

## Notes:

### Supported by:

- Yosemite Tapeware (Standard in box)
- Veritas Backup Exec / NetBackup, Legato NetWorker
- CA ARCserve / BrightStor, Microlite
- OmniBack, Novastor, OTG, Tivoli, Quadracore
- Dantz, BakBone, Cactus, Enhanced Software

Both Ultrium 215 & 230 product families can use the 200GB cartridge (C7971A) or the less expensive 100GB cartridge (C7970A)

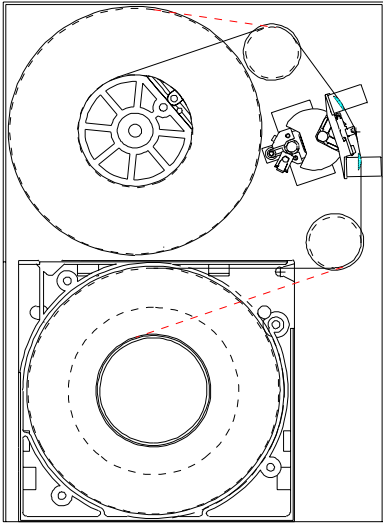
More Information at: [www.hp.com/go/ultrium](http://www.hp.com/go/ultrium)  
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# HP Surestore Ultrium Competitive Positioning

Manufacturer	HP	IBM	Seagate	Quantum	HP	Quantum
<b>Product</b>	Ultrium 230 C7400A#ABA	Ultrium 00N8016	Viper STU42001LWK	SDLT 220 TRS12AA-YF	Ultrium 215 C7420A#ABA	DLT 8000 TH8AF-YF
<b>Capacity Native/Comp</b>	100/200 GB	100/200 GB	100/200 GB	110/220 GB	100/200 GB	40/80 GB
<b>Read/Write speed (native)</b>	15 MB/sec	15 MB/sec	16 MB/sec	11 MB/sec	7.5 MB/sec	6 MB/sec
<b>Per hour Native/Comp</b>	54/108 GB	54/108 GB	57/115 GB	40/80 GB	27/54 GB	22/44 GB
<b>Tested Performance*</b>	85 GB/hour	-	-	70 GB/hour	-	27 GB/hour
<b>Interface</b>	Ultra 2 SCSI	Ultra 2 SCSI	Ultra 2 SCSI	Ultra 2 SCSI	Ultra 2 SCSI	Ultra 2 SCSI
<b>Form Factor</b>	5.25" FH	5.25" FH	5.25" FH	5.25" FH	5.25" HH	5.25" FH
<b>Power Consumption</b>	30W	100W	25W	26W	20W	37W
<b>Media</b>	Ultrium-1	Ultrium-1	Ultrium-1	SuperDLT-1	Ultrium-1	DLTtape IV
<b>App. Street Price (internal)</b>	\$4,765	\$5,090	\$5,200	\$5,075	\$3,780	\$2,600
<b>Contents</b>	data cartridge, cleaning cartridge and software	none	data cartridge, cleaning cartridge and software	none	data cartridge, cleaning cartridge and software	none

\*Exodus Performance Labs



### •Design for data integrity and reliability

- Robust **Ultrium** format and ECC scheme
  - Data recovery from single head failure (or any length single-track damage)
  - Data recovery from track-set (all eight tracks) damage of up to 1.25"
- Read-While-Write
- Dual (redundant) servo heads
- Proven softload mechanism design
  - Simple tape path
  - Designed to handle 100% duty cycle
  - Data rate matching to reduce tape repositions
- Active, internal head cleaner
- Dependable leader capture design
  - Rigid leader pin secured in cartridge
  - Mechanical interlocks and sensors

Part Numbers:	
<b>Ultrium 230</b>	
Int.	C7400A#ABA
Ext.	C7401A#ABA
Array	
Module	C7470A#ABA
<b>Ultrium 215</b>	
Int.	C7420A#ABA
Ext.	C7421A#ABA
Array	
Module	C7492A
<b>Media</b>	
200GB	C7971A 100GB C7970A

Ultrium Specifications	
<b>Tape Capacity:</b>	100/200GB
<b>(Native/comp)</b>	50/100GB
<b>MTBF:</b>	250,000
<b>Duty Cycle:</b>	100%
<b>Interface:</b>	Ultra SCSI 2 LVD
<b>Connector:</b>	68pin HD
<b>Compression:</b>	LTO-DC
<b>Search Speed:</b>	215 – 2.05m/s
	230 – 4.1m/s
<b>Dimensions:</b>	215 – 1.625" x 5.75" x 8.7"
	230 – 3.25" x 5.75" x 8"
<b>Weight:</b>	215 – Int. 4.2lb ext. 10.1lb
	230 – Int. 4.2lb ext. 11.7lb
<b>Electrical:</b>	100-240VAC
<b>Standby:</b>	5W, w/ cart 12W
<b>Operating:</b>	215 – 20W
	230 – 30W
<b>Automation</b>	
<b>Control int.:</b>	RS-422 9pin