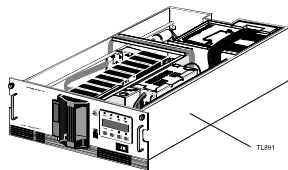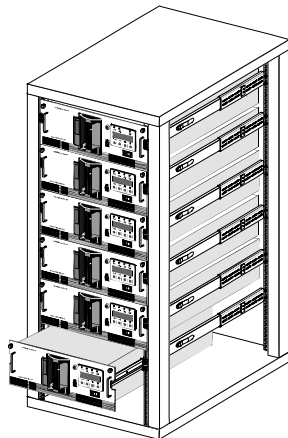## MODELS

**TL881 Base Library Unit
MiniLibrary Expansion Unit
MiniLibrary Data Unit**

Each library installation will require, (1) library system, (1) geography specific localization kit, (1) differential SCSI cable for each DLT drive pair, and up to 10 pieces of DLT media with bar code labels for each TL881 module. Multiple configurations will require additional pass-through kits.

The minimum orderable configuration consists of a single library system (for instances where customer already has the necessary SCSI cables, power cord, and media).
Installation services may also be ordered for customers who wish to have a certified Compaq Engineer perform an on-site library installation.

**Compaq StorageWorks TL881
Library**

**Compaq StorageWorks TL881
Multi-Module Configuration**

High-Capacity Unattended Backup and Restore

The TL881 can provide years of fully automated operation for backup, save & restore and hierarchical storage management of critical data when coupled with a wide array of qualified industry-standard backup applications.

The TL881 is offered as a standalone tabletop unit or as a scalable / stackable rack mount unit, with a removable 10 cartridge magazine, and integral bar code reader and either one or two Compaq DLT 20/40 drives.

Capacity, Performance and Scalability at an aggressive price point

The TL881 is built on a modular concept, offering unparalleled scalability and the ability to custom configure a rack mount solution to meet specific performance and capacity requirements. The TL881 product solution is based on three distinct modules; the TL881 MiniLibrary Base Unit, the MiniLibrary Expansion Unit, and the MiniLibrary Data Unit. The TL881 solution can be configured as a single device or a multi-module device using up to (6) six modules in a single rack configuration.

Note: The MiniLibrary Expansion Unit and MiniLibrary Data Unit is compatible with both the TL881 and TL891 configurations.

TL881 MiniLibrary Base Unit

The TL881 base unit can support up to two DLT 20/40 drives, offering up to 10 MB/s of performance. With 10 data cartridges, the TL881 base unit offers 400 GB of compressed storage capacity in a small 4U height.

MiniLibrary Expansion Unit

The MiniLibrary Expansion Unit assumes control over all attached TL881 modules, allowing for the creation of a multi-module virtual library in a single rack mount configuration. It also provides an additional 640 GB of capacity (no drives). The Expansion Unit supports up to (5) five connected additional TL881 modules in a single rack mount configuration. With the use of a special pass-through mechanism, all tapes within this multi-module configuration are available to all DLT drives, for added performance and redundancy of operation.

This true scalability of performance and capacity allows the end user the opportunity to configure the device to meet their specific requirements as well as offers a "pay as you grow" solution for easy capital management. The multi-unit configuration can also be disassembled at any time and each module can be redeployed to meet changing corporate backup strategies.

MiniLibrary Data Unit

The MiniLibrary Data Unit is a 16 cartridge rack mount module which provides for additional capacity (up to 640 GB of compressed storage) in a TL881 multi-module configuration.

Proven Reliability

Using DLT tape drives, and proven robotics with a rating of 500,000 load/unload cycles, the TL881 is one of the most reliable mini-libraries in the industry.

Proven DLT Technology

Digital Linear Tape uses a proven linear recording technology, a highly accurate tape guide system, and a read after write LZ correction system to provide high-capacity, high reliability data back up and restore. DLT has fast become the industry-standard secondary storage tape format for departmental and enterprise backup.

Manageability

The TL881 library configurations are fully supported through Compaq Insight Manager 4.30, providing information to administrators for both robotic and tape status changes. Other data and automation manageability features are provided via specific third party applications software packages.

O/S Support

Windows NT v4.0
Novell NetWare v4.11
Novell NetWare v4.2
Novell NetWare v5.0

Platform Support

High-End ProLiant Servers
ProLiant 7000 Pentium® Pro
ProLiant 7000 Pentium II Xeon™
ProLiant 6500 Pentium Pro
ProLiant 6500 Pentium II Xeon
ProLiant 6400R Pentium III Xeon
ProLiant 6000 Pentium Pro
ProLiant 5500 Pentium II Xeon

Departmental ProLiant Servers
ProLiant 5500
ProLiant 3000 Pentium II
ProLiant 3000

Workgroup ProLiant Servers
ProLiant 1850R
ProLiant 800
ProLiant 1600

SCSI Controllers
Compaq Dual Channel Wide-Ultra SCSI-3 295554-B21[1]
Compaq Wide-Ultra SCSI 272514-001[1]
Compaq Dual Channel Ultra2 348757-B21[2]
Adaptec AHA2944UW, BIOS v1.25 (two card maximum)[3]

SCSI Converters
Compaq StorageWorks DWZZB, DWZZC

Application Support

Compaq supports the following backup/restore applications software packages:
Seagate Software Backup Exec v7.2 (build 1616.3) for Windows NT
Seagate Software Backup Exec v8.0 (build 258) for NetWare
Computer Associates ArcServeIT v6.61 for Windows NT
Computer Associates ArcServeIT v6.6 for Novell NetWare

Automation and Network Utilities:
Compaq Insight Manager v4.30

Warranty[4]

(3-1-1) Three year warranty[4], first year on-site next day response

SPECIFICATIONS

Control Panel	Library and Drive Status
	Move tape cartridges
	Load/Unload tape drives
	Maintenance (drive cleaning, diagnostics)
	Library Configuration
	Statistics
SCSI Interfaces	Fast Wide Differential, SCSI-2, 68HD
	Fast Wide Single Ended, SCSI-2, 68HD
Form Factor	Rack Mount (RETMA, Metric)
	Table Top

SPECIFICATIONS *(continued)*

Dimensions (HxWxD)

Height	6.97 in/17.70 cm 4U Rack Height
Width	17 in/43.18 cm
Depth	Overall, 23.75 in/60.35 cm
Behind panel	22.75 in/57.79 cm

Unit Weight

TL881 Base Unit

Single Drive	48 lbs/22 kg
Dual Drive	62 lbs/28 kg
Expansion Unit	41 lbs/20 kg
Data Unit	41 lbs/20 kg

Capacity (native)

TL881 Base Unit	200 GB
Expansion Unit	320 GB

Performance (native)   1.5 MB/sec per drive

TL881 Base Unit	Supports 1 or 2 20/40 DLT drives for native transfer rates up to 10.8 GB/hr
Maximum Configuration (6 modules)	Supports 10 x 20/40 DLT drives for native transfer rates up to 54 GB/hr

Storage Capacity   40 GB per cartridge
(compressed @ 2:1)

TL881 Base Unit	Supports 10 DLT IV cartridges for compressed capacity up to 400 GB
Expansion Unit	Supports 16 DLT IV cartridges for compressed capacity up to 640 GB
Data Unit	Supports 16 DLT IV cartridges for compressed capacity up to 640 GB
Maximum Configuration (6 modules)	Supports up to 4 MiniLibrary Data Units (with one TL881 and one Expansion Unit) for native capacities up to 1.80 TB

Power Consumption

TL881 Base Unit	115 VAC @ 1.8 A
	240 VAC @1.2 A
Power Requirement	200W, maximum

Acoustic Noise

Noise Power Emission Level	7.0 bels, maximum
Avg. Sound Pressure Level	52 dBA

Reliability

MTBF	280,000 hours (100% duty cycle)
MSBF	1,000,000 load/unload cycles

Product Safety Requirements and Approvals   EN60950 (IEC 950), UL1950, CSA C22.2 950, VDE 0805/11.92 (TUV), EMKO-TSE 207/94 (NEMKO, FIMKO, DEMKO, SEMKO), NOM-019-SCFI-1993, KONKAR, MEEI, GOST, EVPU, SIQ, VCCI Class 1, C-Tick (Class A), SMA AZ/NZS 3548 Class A, BCIQ, CE Marking Directive (93/68/EEC) (Class A), EMC Directive [89/336/EEC], Low Voltage Directive [73/23/EEC]

COMPAQ INSTALLATION AND CAREPAQS

Additional Warranty protection and/or Compaq Installation packages can be purchased for the TL881 DLT Library products:

Installation	FM-TLINS-IN
3 yrs, 5 x 9, next day response	FM-TLXHW-36
3 yrs, 5 x 9, 4 hour response	FM-TL4HR-36
3 yrs, 7 x 24, 4 hour response	FM-TL724-36
4 yrs, 5 x 9, next day response	FM-TLXHW-48
4 yrs, 5 x 9, 4 hour response	FM-TL4HR-48
4 yrs, 7 x 24, 4 hour response	FM-TL724-48
5 yrs, 5 x 9, next day response	FM-TLXHW-60
5 yrs, 5 x 9, 4 hour response	FM-TL4HR-60
5 yrs, 7 x 24, 4 hour response	FM-TL724-60

RELATED OPTIONS

The TL881 solution includes seven separate SKU details:

SKU1 – DLT Library System

Includes DLT Library device, 1 or 2 drives, bar code reader, removable 10 slot magazine,, (1) DLT IV tape, DLT cleaning cartridge, 50 bar code labels, English hardcopy documentation (Installation and User's Guide), translated documentation CD, installation and configuration CD, Compaq Storage Management Solutions kit, MRU and diagnostic software package. Rackmount versions contain mounting rails for Compaq racks, StorageWorks racks, RETMA and Metric racks. MiniLibrary Expansion and Data units include pass-through mechanism for multiple configuration installation.

SKU2 – Localization Kit

Includes local power cord (hardcopy translated documentation - Japan)

SKU3 – Drive Upgrade Kit

Includes one DLT 20/40 drive for upgrade into single drive TL881 library

SKU4 – Cartridges & Accessories

Pass-through mechanism kit for multiple module configurations, additional media or additional magazines

SKU5 – SCSI Cable Kits

For direct SCSI connectivity

SKU6 – ProLiant Connectivity Kits

For direct SCSI connectivity of FWD libraries to Compaq FWSE ProLiant adapters. Includes all required cables and one FWSE to FWD SCSI converter

SKU7 – Rack Mounting Kits

For Table Top to Rack Mount device conversion

DLT Library System

TL 881 DLT, 1 Drive, Table Top, FWD	128667-B21
TL 881 DLT, 2 Drive, Table Top, FWD	128667-B22
TL 881 DLT, 1 Drive, Table Top, FWSE	128668-B21
TL 881 DLT, 2 Drive, Table Top, FWSE	128668-B22
TL 881 DLT, 1 Drive, Rack Mount, FWD	128669-B21
TL 881 DLT, 2 Drive, Rack Mount, FWD	128669-B22
MiniLibrary Expansion Unit	120877-B21
MiniLibrary Data Unit	128670-B21

RELATED OPTIONS *(continued)*

Localization Kits

Country Kit, US/Canada/Mexico	349386-001

Drive Upgrade Kits

Add-On 20/40 Drive For TL881	128671-B21

Cartridges and Accessories

MiniLibrary Pass-Through Mechanism Kit	120880-B21
10 Slot Magazine	120881-B21
DLT IV Data Cartridges, single pack	295194-B21
DLT IV Data Cartridges, 7 pack	295192-B21
DLT Cleaning Cartridge	199704-001

Host Bus Adapters

StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter	157299-B21

SCSI Cable Kits

Wide Differential SCSI cable, 5 m	328215-001
Wide Differential SCSI cable, 10 m	328215-002
Wide Differential SCSI cable, 15 m	328215-003
Wide Differential SCSI cable, 20 m	328215-004
SCSI Cable, VHDCI / W, 6 ft	341176-B21
SCSI Cable, VHDCI / W, 12 ft	341177-B21

ProLiant Connectivity Kits

Fast Wide Single Ended, 68 HD	
US, Canada, Mexico	113395-001
Fast Wide Single Ended, VHDCI	
US, Canada, Mexico	113396-001
SCSI Converter Rack Mounting Bracket (holds 4 Connectivity Kits)	122612-B21

Rack Mounting Kits

MiniLibrary Table Top to Rack Mount Conversion Kit, Metric/RETMA racks	120882-B21
MiniLibrary Table Top to Rack Mount Conversion Kit, Compaq racks	120883-B21

[1] FWSE Adapter – For FWD Library, requires use of ProLiant Connectivity kit or SCSI converter.

[2] LVD Adapter – For FWD Library, requires use of ProLiant Connectivity kit or SCSI converter.

[3] Third Party Adapter – Tested but not supported by Compaq.

[4] Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details. In Canada, consult the Product Information Center at 1-800-567-1616 for details.