Quantum|ATL 7100 Series

# Facilities Planning and Installation Guide

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Ver. 2 Rel. 2



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	Preface
Audience	This document was written for Field Service Engineers (FSEs) of the Quantum   ATL 7100 Series library (library). It describes facility preparation and provides the procedures for first-time installation of the library.
Purpose	<ul> <li>This document provides the following information:</li> <li>Library specifications</li> <li>Site requirements</li> <li>Unpacking and moving instructions</li> <li>Installing the library</li> </ul>
Document Organization	<ul> <li>Following is a brief description of chapter contents.</li> <li><u>Chapter 1, "Library Specifications and Site Requirements,"</u>, provides the specifications of the library and discusses site flooring, environmental and electrical requirements.</li> </ul>

	• <u>Chapter 2, "Unpacking and Moving the Library,"</u> , describes how to unpack and move the library to its final installation area.		
	• <u>Chapter 3, "Installing the Library,"</u> , lists the tools required and provides the procedures necessary for installing and testing the library prior to operation.		
	• <u>Appendix A, "SCSI Cabling Options,"</u> lists the SCSI cabling options for the library		
Notational Conventions	This manual uses the following conventions:		
	<b>Caution:</b> Cautions indicate potential hazards to equipment and are included to prevent damage to equipment.		
	<b>Note:</b> Notes emphasize important information related to the main topic.		
	Warning: Warnings indicate potential hazards to personal safety and are included to prevent injury.		
	This manual uses the following:		
	• Right side of the library — Refers to the right side as you face the component being described.		
	• Left side of the library — Refers to the left side as you face the component being described.		
	<ul> <li>b — All binary numbers are succeeded by "b."</li> </ul>		
	<ul> <li>h — All hexadecimal numbers are succeeded by "h."</li> </ul>		
	• Error or attention conditions are represented in parenthesis that translate as follows:		

(SK=S ASC=AA ASCQ=QQ)

where:

- S hexadecimal sense key value
- AA hexadecimal additional sense code
- $\rm QQ-hexadecimal$  additional sense code qualifier

Related	Documents related to the library are shown below:
Documents	·

Document Number	Title	Description
6241102	Quantum   ATL 7100 Series Tape Library Operator's Guide	Describes the operator-accessible components of the library and provides both operating and troubleshooting procedures.
6241104	Quantum   ATL 7100 Series Library Diagnostic Software User's Manual	Provides procedures for installing and using the Quantum   ATL 7100 Series Diagnostic Software.
6241105	Quantum   ATL 7100 Series Library Software Interface Guide	For software engineers and programmers developing applications to control the Quantum   ATL 7100 Series library.

#### **SCSI-2** Specification

The SCSI-2 communications specification is the proposed American National Standard for information systems, dated March 9, 1990. Copies may be obtained from:

Global Engineering Documents 15 Inverness Way, East Englewood, CO 80112 (800) 854-7179 or (303) 397-2740

#### Contacts

Quantum | ATL company contacts are listed below.

#### Quantum|ATL Corporate Headquarters

To order documentation on the library or on other products contact:

Quantum | ATL P.O. Box 57100 Irvine, CA 92619-7100 (949) 856-7800 (800) 284-5101

#### **Technical Publications**

To comment on existing documentation send e-mail to:

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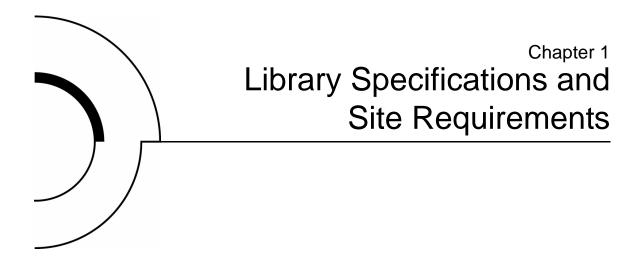
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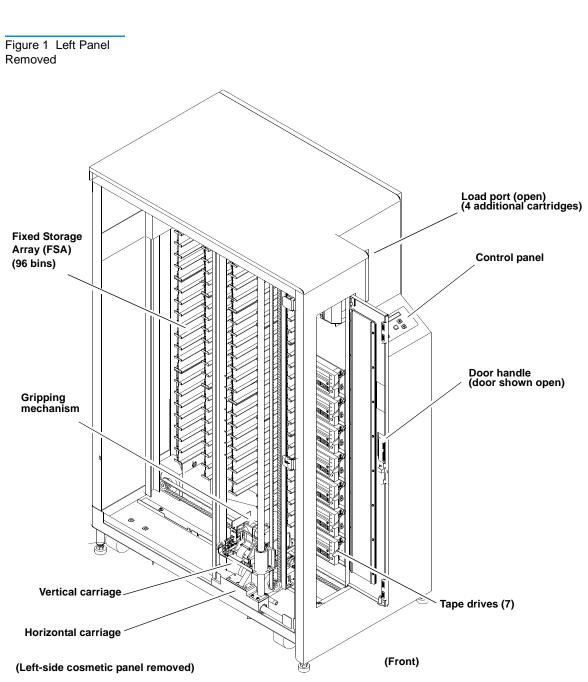
Preface



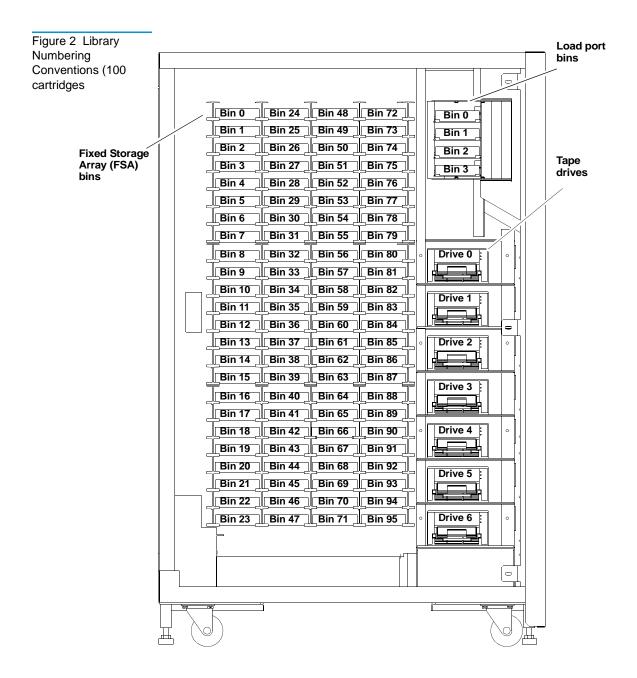
This section provides the library physical specifications and addresses the floor and electrical requirements of the site.

## Library Description

The Quantum | ATL 7100 Series library (library) is the automated storage and retrieval component of an automated tape library system (see <u>figure 1</u>). It contains up to seven tape drives and is capable of storing a maximum of 96 tape cartridges in a Fixed Storage Array (FSA). An operator-accessible load port at the front of the library can hold an additional four tape cartridges for a maximum total of 100.

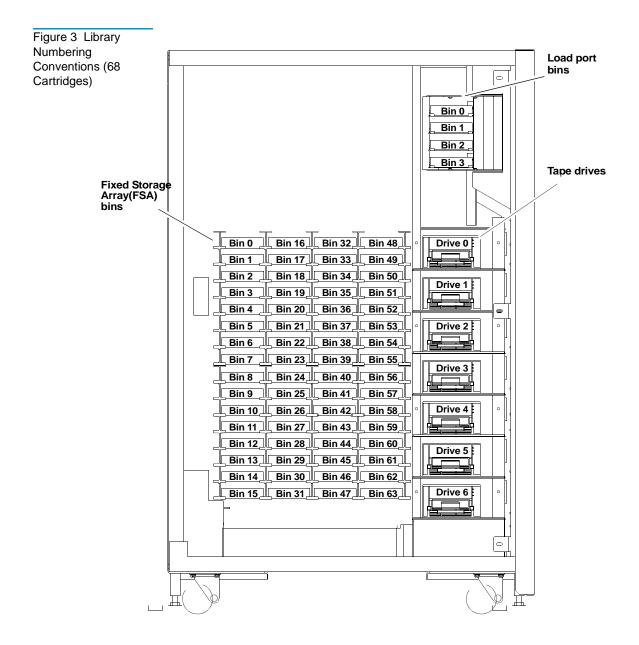


	A host computer communicates with the library through a SCSI interface using the SCSI-2 medium changer command set. In a typical operation, the host commands the robotics to transfer tape cartridges between storage bins (in the FSA), tape drives or the load port. Each time a tape cartridge is transferred, a gripping mechanism is moved to the tape cartridge location where it "picks" the tape cartridge, moves it to the designated (new) location and then "places" it.
Supported Tape Drives and Cartridges	The library is capable of supporting up to seven tape drives.
Bin and Tape Drive Numbering Conventions	Figure 2 shows the numbering conventions for the 100 cartridge library's <ul> <li>FSA bins</li> </ul>
	Load port bins
	• Tape drives.
	This numbering convention is used in the diagnostic software and the library menu mode, which is viewed in the status display area of the control panel.



<u>Figure 3</u> shows the numbering convention for the 68 cartridge library's Fixed Storage Array bins, load port bins, and tape drives.

This numbering convention is used in the diagnostic software and the library menu mode, which is viewed in the status display area of the control panel.



## Library Specifications

The following tables provide the specifications of the library.

Table 1 Library Mechanical Specification	height	56.5 inches (143.5 cm)		
	width	23.5 inches (59.7 cm)		
	depth	36.5 inches (92.7 cm)		
	weight	550 lb. (250 kg) with 96 tape cartridges and 7 tape drives installed		
Table 2 Library Power Specification	AC power rating		100-120V/200-240V, 7A/3.5A, 50/60 Hz	
	AC voltage range		90-132 VAC or 180-264 VAC	
	frequency range		47-63 Hz	

Table 3 Library Environmental Specification	temperature storage — short-term (< 60 days) storage — long-term (>60 days) transport operating	-40 to 151°F (-40 to 66°C) 41 to 122°F (5 to 50°C) -40 to 151°F (-40 to 66°C) 50 to 90°F (10 to 32°C)
---	---	--

relative humidity non-operating (storage) non-operating (transport) operating	95% (Max. Wet Bulb Temp: 90°F/ 32°C) 95% (Max. Wet Bulb Temp: 115°F/46°C) 10-90% (Max. Wet Bulb Temp: 82°F/28°C)
altitude	42,000 ft. (12.8 km)
short-term (<60 days storage)	13,200 ft. (4.0 km, 471 mmHg) @
operating	76°F/24.4°C Max.

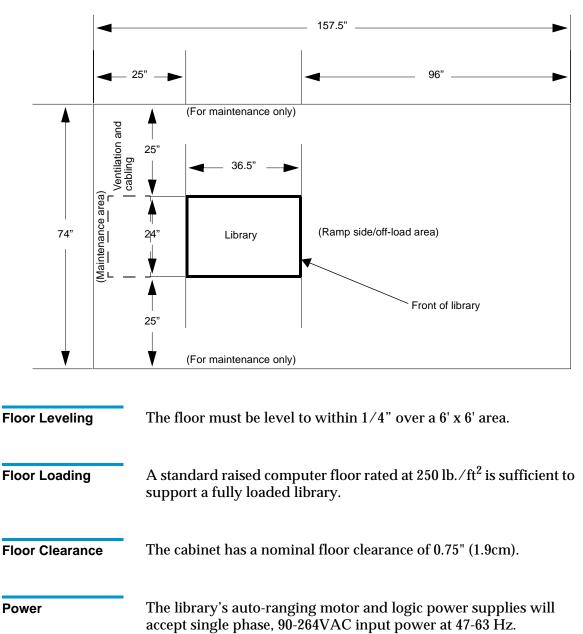
## Site Requirements

The following paragraphs provide the floor space, leveling, floor type, and loading requirements for the floor of the installation site.

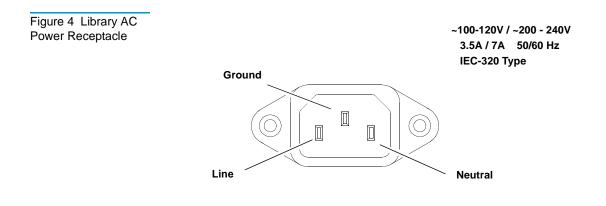
**Floor Space** 

<u>Table 4</u> shows the floor space required by the library, including the off-load and maintenance access areas.

Table 4Library FloorSpace Requirements

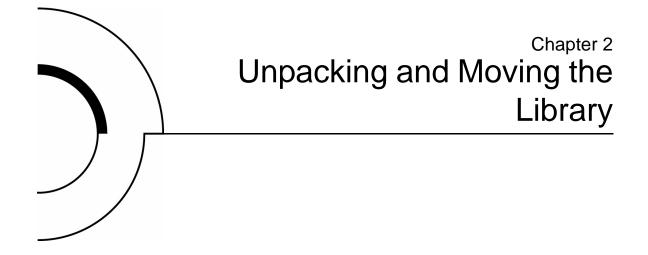


The power inlet connector is a IEC-320 connector. For international applications you must replace the power cord set with a harmonized  $3x2.0mm^2$  power cord set that is approved by the country where used.



**Grounding** The installation site must provide an earth ground cable for the library.

Chapter 1 Library Specifications and Site Requirements Site Requirements



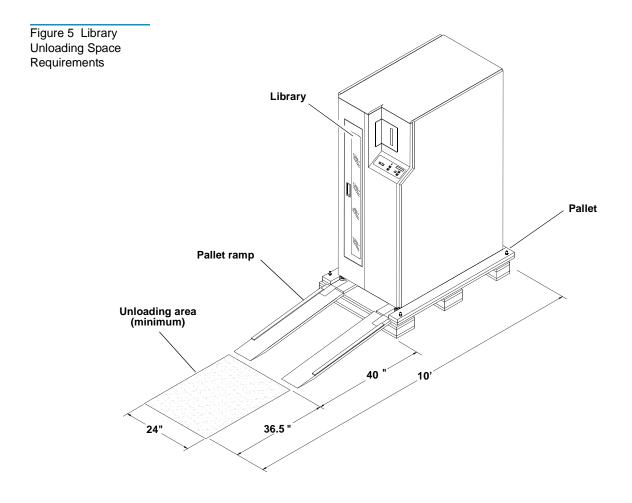
This chapter describes how to unpack and move the library to the final installation area.

**Caution:** The procedures in this chapter must be performed in the order in which they appear in this chapter.

## Receiving the Library

When you receive the crated library, unload it as close to the final installation area as possible and allow approximately ten feet in front of the off-load side of the pallet. This ensures that there is enough space to lower the ramp before removing the library from the pallet.

Also make sure that the room has a minimum ceiling height of eight feet to provide clearance for removal of the box from the pallet. Inspect the crating material for any damage that may have occurred during shipment. Report any damage found to the shipper immediately.



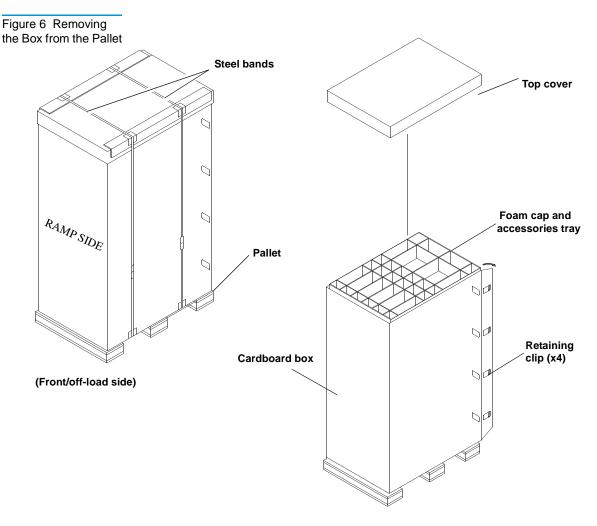
## Unpacking the Library

To unpack the library:

1 Cut the two steel bands that secure the library and packing material to the pallet (see <u>figure 6</u>).

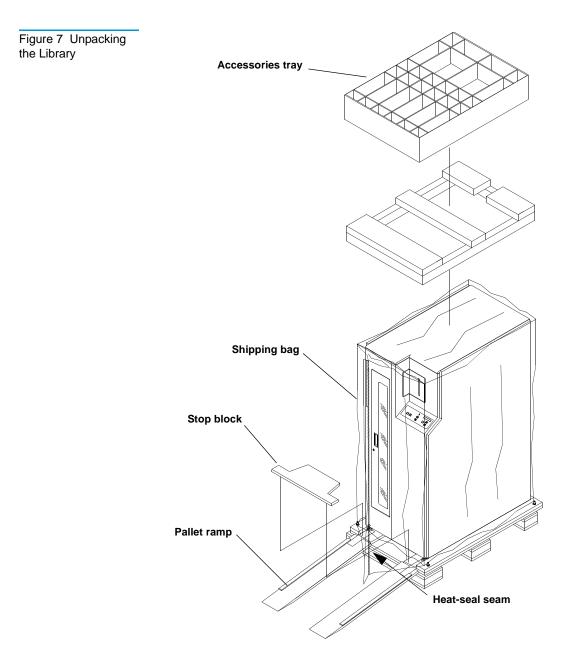
**Warning:** Use care when cutting the steel bands that secure the library to the pallet. These bands are under tension and will snap away when cut.

- 2 Lift the cardboard box top cover straight up and off the pallet.
- **3** From the rear side of the container, pull the four cardboard box retaining clips to their open position, and unwrap the cardboard box from the library (see <u>figure 6</u>).



- **4** Remove the accessories tray from the top of the foam cap.
- **5** Remove the accessories tray from the top of the foam cap.
- **6** Remove the stop block (located underneath the library in front of the casters).
- 7 Slide out the two pallet ramp sections located underneath the library. Secure them to the pallet using the Velcro straps (see <u>figure 7</u>).

**8** Cut the shipping bag vertically along the heat-seal seam (see <u>figure 7</u>).



**9** Inspect the library for damage that may have occurred during shipping.

## Rolling the Library off of the Pallet

To remove the library from the pallet, use the procedure below and refer to <u>figure 6</u>.

**Warning:** The library weighs approximately 500 lb. It is recommended that two people perform the following procedure.

- 1 Verify that all leveling feet (located on the underside of the library at the four corners) are in the up position. If not, rotate each of the four feet clockwise until they are fully retracted.
- **2** With one person guiding the library at the off-load side of the pallet, gently push the library down the ramp and onto the floor.
- **3** Carefully fold and save the shipping bag. The bag is required if you need to package the library for reshipment.

### Moving the Library to the Final Installation Area

**Warning:** The library weighs approximately 500 lb. Use two people to move the library.

**Note:** When moving the cabinet, one person should guide the library from the rear while the other person pushes from the front. Do not push the library up or down a ramp with an incline greater than 10°.

**Caution:** The library has a nominal floor clearance of 0.75" (1.9cm). Place stiff plastic or rubber mats on top of carpeting that depresses more than the nominal clearance and over floor cracks and door jambs prior to rolling the library over them.

**Caution:** Any side of the library can be used to push the library to the final installation area. However, it is preferred to push from the front of the library. When pushing from the front, DO NOT push on the following non-structural portions:

- Load port door
- Control panel
- Front door
- Front door handle

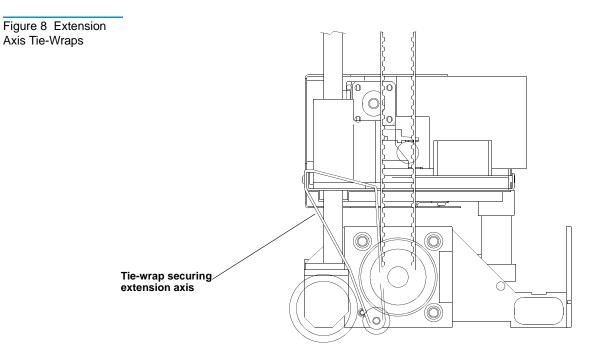
To move the library to the final installation area:

- **1** Based on the information above, prepare the path to the final installation area.
- **2** Verify that all leveling feet are fully retracted. If the feet are not fully retracted, rotate each of the four feet counterclockwise until they are fully retracted.
- **3** Roll the library to the final installation area.

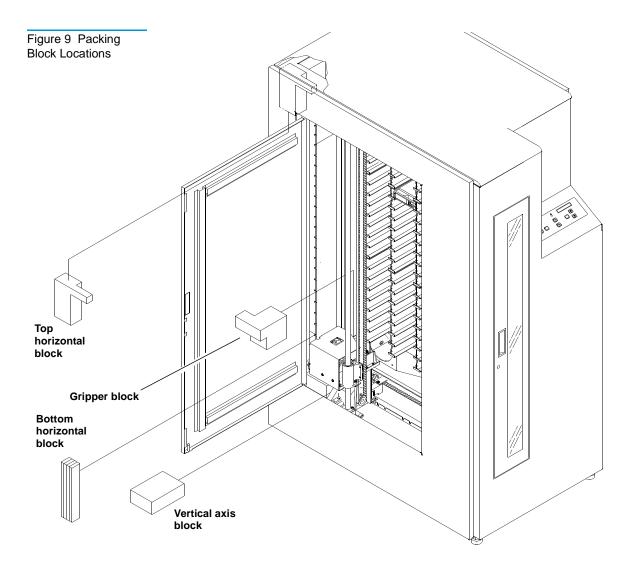
## **Removing the Protective Packaging Material**

Refer to the <u>figure 9</u> throughout this procedure.

- 1 Locate the library door keys in the accessory kit and open the storage array door.
- **2** Remove the block securing the gripper.
- **3** Without cutting it, remove the tie-wrap securing the extension axis platform to the horizontal axis carriage (see <u>figure 8</u>). The tie-wrap is reusable.
- **4** Gently lift the extension axis up and pull the vertical axis block out and away from the library.
- **5** Without cutting, remove the tie-wraps securing the horizontal carriage assembly to the frame. The tie-wraps are reusable.
- 6 Gently push the carriage assembly forward.
- 7 Remove both the top and bottom horizontal axis blocks.
- **8** Slowly lower the extension axis to the bottom (resting) position.
- **9** Close the storage array door.



#### Chapter 2 Unpacking and Moving the Library Removing the Protective Packaging Material



Storing the Packaging Material

To store packaging material:

- 1 Slide the two pallet ramp sections into their shipping position in the pallet.
- **2** Collapse the cardboard box.
- **3** Store the box, molded top, pallet and all other packing material for possible later use.

## Packaging the Library for Reshipment

If it becomes necessary to crate the library for shipment, use the procedure below and refer to the figures in this chapter.

**Note:** This procedure assumes that all cartridges have been removed, power is off and cables are disconnected.

**Caution:** Observe proper ESD protective measures to prevent damage to the library.

- 1 Open the storage array door.
- **2** Gently lift the extension axis up and place the vertical axis block in position (see <u>figure 9</u>), then lower the extension axis to the bottom position.
- **3** Install both the top and bottom horizontal axis blocks.
- **4** Gently slide the robotic mechanism towards the rear of the library so that is up against the horizontal axis packing blocks.
- **5** Install the tie-wraps securing the extension axis for shipment (see <u>figure 8)</u>.
- 6 Close the storage array door.
- **7** Raise the leveling feet by rotating each foot counterclockwise (as viewed from above) until they are fully retracted.
- 8 Move the library to the crating area observing all guidelines described in <u>Moving the Library to the Final Installation Area</u> on page 17.
- **9** Slide out the two pallet ramp sections (located underneath the library) and secure them to the pallet using the Velcro straps (see <u>figure 7</u> on page 15).
- **10** Unfold the shipping bag and align the white tape to the pallet bottom with respect to where the library casters will roll onto the pallet.

- **11** Roll the library onto the pallet and into the shipping bag.
- **12** Seal the shipping bag by folding the seam over and taping the edge.
- **13** Install the stop block in front of library front casters (see <u>figure</u> <u>7</u> on page 15).
- **14** Install the foam cap on the library and install accessory tray.
- **15** Wrap the box around the library and pallet and install the four plastic retaining clips (refer to <u>figure 6</u> on page 14).

**Caution:** It is recommended that the steel bands be tightened to approximately 200 lb. of tension prior to shipment.

**16** Install steel banding to secure the library and packing material to the pallet.



This chapter describes the procedures necessary to install the library.

**Note:** The customer's System Administrator should be present during these procedures.

**Caution:** The procedures in this chapter must be performed in the order in which they appear in this chapter.

### **Required Tools**

Use the following tools to install the library:

- #2 Phillips screwdriver
- Wire cutters
- Carpenter's level
- <sup>3</sup>/<sub>4</sub> inch open-ended wrench

- Digital voltmeter (DVM)
- ESD protection kit

### Leveling the Library

To level the library:

**Note:** Completing this task involves leveling one side of the library at a time, moving in a clockwise direction starting at the front and ending with the right-side of the library.

- 1 Move the library onto its designated footprint in the final installation area.
- **2** Lower each foot of the library until it makes contact with the floor.

**Caution:** When adjusting the feet for leveling purposes, DO NOT raise any foot so high that excess weight is transferred to any single caster.

- **3** Moving in a clockwise direction from the library front, rotate each foot clockwise so that each caster is raised approximately 1/4" off of the floor.
- 4 Center a carpenter's level on the top front edge of the library.
- **5** Check the gauge on the level. If the front of the library is level, proceed to step 6. If it is not level:
  - **a** Determine the tilt of the library and adjust the appropriate front foot with the wrench, checking the gauge each time that a foot is rotated <sup>1</sup>/<sub>4</sub> turn.
  - **b** Repeat step 5 until the front is level, then continue to the next step.
- 6 Center the carpenter's level on the top left edge of the library.

- 7 Check the gauge on the level. If the left side of the library is level, proceed to step 8. If it is not level:
  - **a** Determine the tilt of the library and adjust the appropriate left side foot with the wrench, checking the gauge each time that a foot is rotated <sup>1</sup>/<sub>4</sub> turn.
  - **b** Repeat step 7 until the left side is level, then continue to the next step.
- 8 Center the carpenter's level on the top-rear edge of the library.
- **9** Check the gauge on the level. If the rear of the library is level, proceed to step 10. If it is not level:
  - **a** Determine the tilt of the library and adjust the appropriate rear foot with the wrench, checking the gauge each time that a foot is rotated <sup>1</sup>/<sub>4</sub> turn.
  - **b** Repeat step 9 until the rear is level, then continue to the next step.
- **10** Center a carpenter's level on the top right-side edge of the library.
- **11** Check the gauge on the level. If the right side of the library is level, proceed to step 12. If it is not level perform the following:
  - **a** Determine the tilt of the library and adjust the appropriate right-side foot with the wrench, checking the gauge each time that a foot is rotated <sup>1</sup>/<sub>4</sub> turn.
  - **b** Repeat step 11 until the right side is level, then continue to the next step.
- **12** After individually leveling each side, return to the front of the library. Center the level on the top-front edge and check the gauge. Make any minor adjustments necessary to the feet and then move in a clockwise fashion around the library, repeating this step, until the library is level.

## **Operational Setup and Checkout**

The purpose of the following procedures is to verify the proper operation of the library before placing the library on-line.

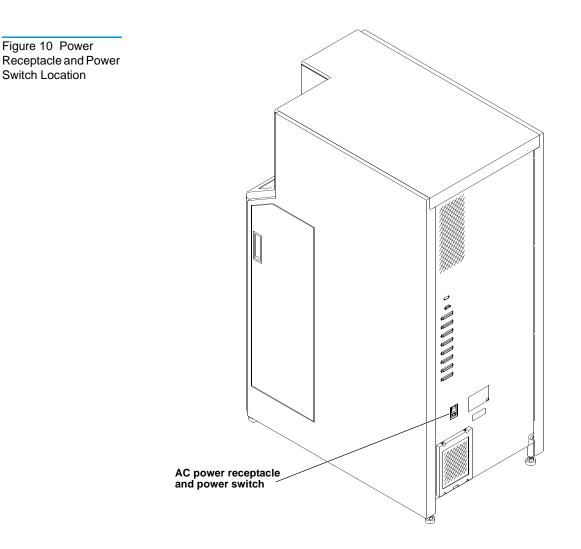
Applying Power to<br/>the LibraryTo apply power to the library:<br/>1 Verify the following:

- Actuators move freely in the horizontal and vertical directions
- All doors are closed
- All cosmetic panels are attached
- Power switch in the O (off) position

**Caution:** Using a digital voltmeter (DVM), verify that the facility power is 90-132VAC or 180-264 VAC @ 47-63Hz before connecting the AC power cord.

- **2** Connect the AC power cord to the rear panel and facility power (see <u>figure 4</u>).
- **3** On the rear panel, set the POWER switch to the " | " (on) position (see <u>figure 4</u>).
- 4 After several seconds, verify that the Status Display Area (SDA) shows System On-line.

Note: On-line is only displayed if the library power-up state is configured for On-Line. Otherwise, System Off-line is displayed in the SDA. See the Operator's Guide for more information.



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### Setting SCSI Addresses and Running the Library Self-Test

After power is applied to the library, you need to do the following:

- Set the library SCSI address
- Set tape drive SCSI addresses
- Run a library self-test

Refer to the *Quantum* / *ATL* 7100 Series Tape Library Operator's Guide for a description of how to set SCSI addresses and run a library self-test.

## Connecting the Library to the Host Controller

This section explains how to connect the host cables to the library. The library is shipped with the internal cabling configured for four separate host SCSI connections (four-wire) with all busses terminating externally. Alternate host connection configurations are discussed in <u>Appendix A</u>, <u>"SCSI Cabling Options,"</u> of this guide.

**Note:** Internal SCSI cabling changes are required to configure the library for a configuration different than the default. Any additional cables required for internal cabling changes are provided in the library accessories kit. The accessories kit does NOT include any additional cabling or terminators for connection to the host computer.

Table 5 7100 Series SCSI Cabling Configuration	Library Configuration	Default SCSI Wiring Configuration
	2/68	1-Wire
	4/68	2-Wire
	7/68	4-Wire
	2/100	1-Wire
	4/100	2-Wire
	7/100	4-Wire

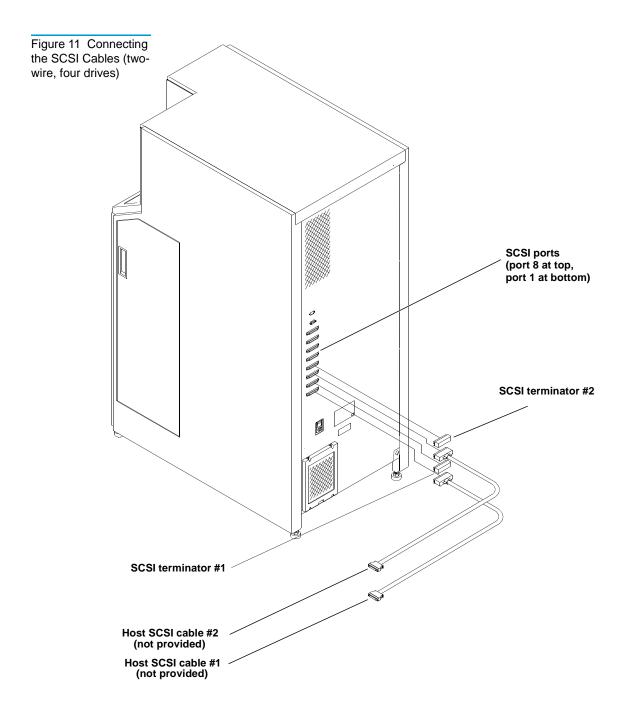
The following procedure describes how to connect a 4/100 library to the host when using the default two-wire, four-drive configuration:

- 1 Remove power from the library as follows:
  - **a** Press and release the control panel **STANDBY** button, and verify that System Off-line is displayed in the SDA.
  - **b** At the rear panel, set the **POWER** button to the "0" (off) position.
- **2** Power down all SCSI devices that will be connected on the same bus as the library.

**Caution:** The library uses differential (diff) SCSI connections. If your host adapter is single-ended (SE) SCSI, you must use a SE-to-diff converter for proper communications.

**3** Connect the two library-to-host SCSI cables to the host adapters.

- **4** Connect one library-to-host SCSI cable to the library rear panel (see <u>figure 11</u>) at SCSI PORT 1.
  - **Note:** Figure 11 shows a two-wire, four drive configuration. If you are using a different configuration, the cable connections will be different. See Appendix A for more information about different configurations.
- 5 Install the SCSI terminator (provided in the accessories kit) for host SCSI cable 1 on the rear panel connector labeled SCSI PORT 2.
- **6** Connect the other library-to-host SCSI cable to the library rear panel at SCSI PORT 3.
- 7 Install the SCSI terminator (provided in the accessories kit) for host SCSI cable 2 on the rear panel connector labelled SCSI PORT 4. Refer to <u>figure 11</u>.
- **8** On the library rear panel, set the **POWER** button to the "|" (on) position.
- **9** After several seconds, verify that the SDA shows System Online.
- **10** Apply power to all other SCSI targets connected.
- **11** Apply power to the host.

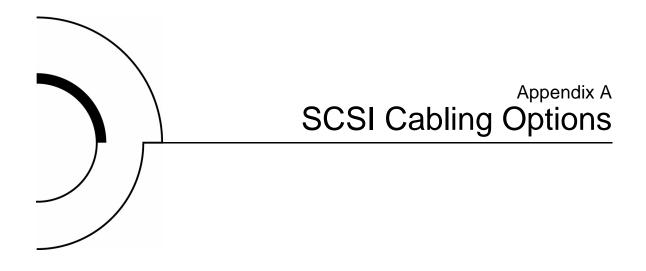


## Preparing the Library for Operation

After the library is installed and connected to the host, you can perform the procedures listed below as needed to prepare the library for operation.

For a description of how to perform these procedures, refer to the *Quantum* | *ATL* 7100 Series Tape Library Operator's Guide.

- Defining the library power-up state
- Enabling/disabling the auto clean option
- Enabling/disabling the auto load option
- Setting the language used for the status display area
- Enabling/disabling 4/52 identity mode
- Loading the library with cartridges (either through the load port or by bulk loading of cartridges through the storage array door)
- Performing an inventory
- Turning the interior light on or off



The library is shipped with the internal cabling configured for two separate host SCSI connections (two-wire) and four drives.

In this configuration, the library robotics controller and the top two drives (drives 0 and 1) are on one SCSI bus (SCSI PORT 1) and the other two drives (drives 2 and 3) are on a second bus (SCSI PORT 3).

The tape drives and the library can be reconfigured according to your needs by using the cable (part no. 6210567) provided in the accessories kit shipped with each unit.

**Note:** The accessories kit contains two SCSI differential terminators. Some library configurations may require additional terminators.

# **SCSI** Ports

The library has eight 68-pin Micro-D SCSI connectors on the rear of the unit labeled SCSI PORT 1 through SCSI PORT 8 (see <u>table 6</u>).

**Note:** None of the host-to-library SCSI cabling is supplied with the library.

Table 6 Library SCSI Addresses (default)

SCSI Device	SCSI Address
robotics controller	0
tape drive 0 (top)	1
tape drive 1	2
tape drive 2	3
tape drive 3	4
tape drive 4	5
tape drive 5	6
tape drive 6 (bottom)	1 (second bus)
tape drive 3	4
tape drive 4	5

**Note:** SCSI address 7 is typically reserved for the host computer.

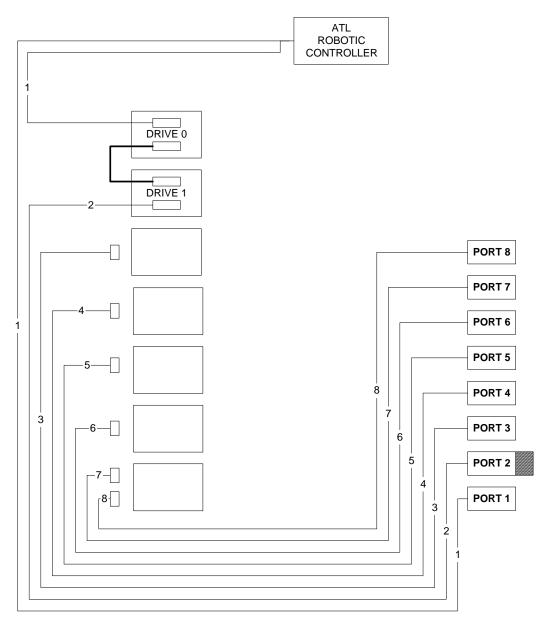
# Single-Wire Configuration

This configuration of the library has all of the SCSI devices on a single SCSI bus from the host controller. The host SCSI bus connects to the rear panel connector labeled SCSI PORT 1 and is externally terminated at the connector labeled SCSI PORT 4 (see figure 12).

The rear panel connectors labeled SCSI PORT 2 and SCSI PORT 3 are not used in this configuration.

**Note:** The spare SCSI cable from the accessories kit is required to configure the library in a single-wire configuration.

Figure 12 SCSI Cabling Block Diagram (2 drives, 1 wire)



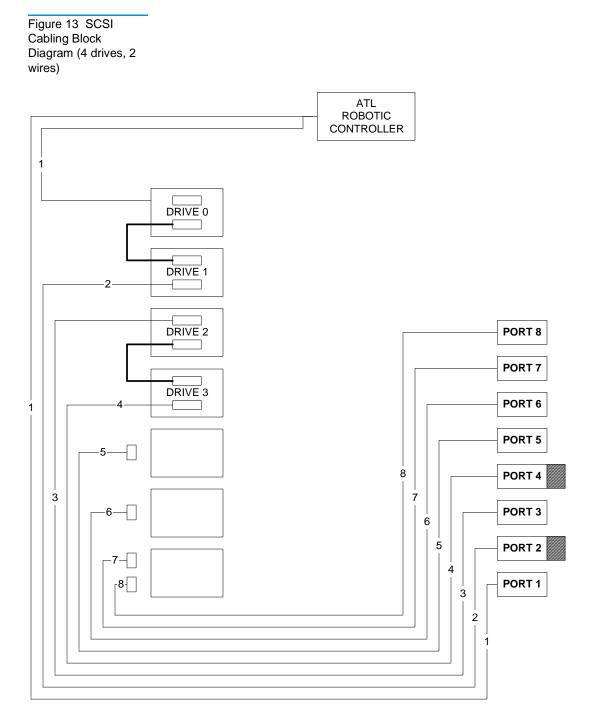
## Two-Wire SCSI Configuration (Default)

This configuration connects the robotics controller, Drive 0, and Drive 1 on one SCSI channel (interface). The second SCSI channel is configured for drive 2 and drive 3 (see <u>figure 13</u>).

The first channel from the host controller connects to the rear panel connector labeled SCSI PORT 1 on the back of the unit and externally terminates at the connection labeled SCSI PORT 2. The second SCSI channel from the host connects to the connector labeled SCSI PORT 3 and externally terminates at the rear panel connector labeled SCSI PORT 4.

**Note:** This is the default configuration of the library as shipped from the factory. The external SCSI terminators are provided in the accessories kit, but they are not shipped installed on the rear panel.

Appendix A SCSI Cabling Options Two-Wire SCSI Configuration (Default)



# Four-Wire SCSI Configuration

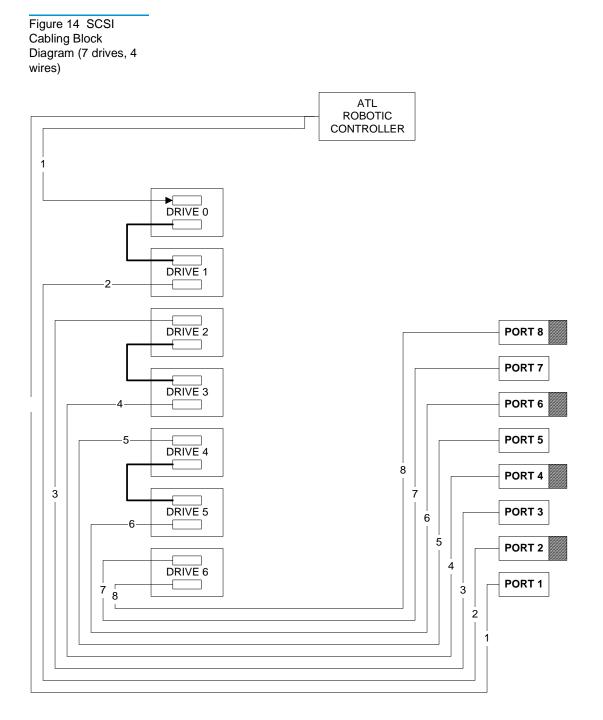
This configuration connects the robotics controller and drive 0 on one SCSI channel from the host controller, and the remaining drives in the system are individually connected to separate SCSI channels to the host (see <u>figure 14</u>).

The first channel from the host connects to the rear panel connector labeled SCSI PORT 1 and terminates internally at the drive interface PWA for Drive 0. The second channel from host controller connects to the rear panel connector labeled SCSI PORT 2 and terminates internally at the drive interface PWA for Drive 1.

The third channel from the host controller connects to the connector labeled SCSI PORT 3 and terminates internally at the drive interface PWA for Drive 2. The fourth channel from the host controller connects to the connector labeled SCSI PORT 4 and terminates internally at the drive interface PWA for Drive 3.

**Note:** This configuration of the library requires two additional SCSI terminators. The accessories kit includes two terminators that can be used internally or externally with the library.

Appendix A SCSI Cabling Options Four-Wire SCSI Configuration





## **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

Operation of this equipment in a residential area may cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1 This device may not cause harmful interference.

**2** This device must accept any interference received, including interference that may cause undesired operation.

# Industry Canada (Digital Apparatus)

	<b>Reference:</b> Interference-Causing Equipment Standard, ICES-003 Issue 2
	This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
	Cet appareil numérique de la classe A respecte toutes les exigences du Reglément sur le matériel brouilleur du Canada.
CISPR-22 WARNING!	This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
ACHTUNG!	Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmassnahmen verantwortlich ist.
ATTENTION!	Ceci est un produit de classe A. Dans un environment domestique, ce produit peut causer des interférences radioélectriques. Il appartient alors à l'utilisateur de prendre les mesures appropriées.

### Notice for USA and Canada Only

If shipped to USA, use the UL LISTED power cord specified below for 100-120 V operation. If shipped to Canada, use the CSA CERTIFIED power cord specified below for 100-120V operation.

Plug Cap	Parallel blade with ground pin (NEMA 5-15P configuration)
Cord	Type: SJT, three 16 AWG (1.5 mm <sup>2</sup> ) or 18 AWG (1.0 mm <sup>2</sup> ) wires
Length	Maximum 15 feet (4.5m)
Rating	Minimum 10 A, 125 V

### ATTENTION

LIRE LA REMARQUE DANS LE MODE D'EMPLOI.

REMAaRQUE

CETTE REMARQUE NE CONCERNE QUE LES ÉTATS-UNIS ET LE CANADA.

En cas d'envoi aux États-Unis, utiliser le cordon d'alimentation CERTIFIÉ UL et convenant pour 100-120 V.

En cas d'envoi au Canada, utiliser le cordon d'alimentation CERTIFIÉ CSA et convenant pour 100-120 V.

Fiche	Broches parallèles avec une broche de mise à la terre (configuration NEMA 5-15P)
Cordon	Type: SJT, trifilaire 16 AWG (1.5 mm <sup>2</sup> ) ou 18 AWG (1.0 mm <sup>2</sup> )
Longeur	Maximum 15 pieds (4.5m)
Capacité	Minimum 10 A, 125 V

### Laser Statement

Class 1 Laser Product	<b>CAUTION</b> : With all panels and enclosures in place, this product is rated as a Class I laser product. The bar code scanner inside this product, however, is a Class II laser. Avoid exposure to the laser light emitted from the bar code scanner. Do not stare into the beam.
	<b>CAUTION</b> : Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous exposure.
Laser Klasse 1	<b>VORSICHT</b> : Dieses Produkt Enthdlt Einen Laser Der Kategorie II. Laserstrahlen - Der Strichcode-scanner Gibt Laserstrahlen aus. VERMEIDEN SIE jeden Blickkontakt und direkten kvrperlichen Kontakt mit diesen Strahlen.
	<b>VORSICHT</b> : Ein nicht ordnungsgemd_er (siehe hier enthaltene Anweisungen) Einsatz bzw. Dnderungen der Betriebsleistung kvnnen einen gesundheitsgefdhrdenden Kontakt zur Folge haben.
Appareil à Laser de Classe 1	<b>ATTENTION</b> : Ce produit émet de la classe laser II. Rayonnement laser - NE PAS fixer des yeux le rayon. Éviter les expositions - Le rayonnement laser est émis à partir du lecteur optique de code barre.
	<b>ATTENTION</b> : L'utilisation de contrôles ou d'ajustements de performance des procédures autres que ceux indiqués ici peut entraîner une exposition dangereuse.
Producto Láser de Clase 1	<b>¡ATENCIÓN!</b> Este producto contiene laser de clase II. Luz de laser - NO mire el rayo. Evite el contacto con la luz: la luz de laser se emite desde el explorador de código de barras.

¡ATENCIÓN! El uso de los controles o ajustes para realizar
procedimientos que no son especificados puede provocar una
situación peligrosa.

Luokan 1	ATTENZIONE: Questo prodotto emette una luce laser di Classe II.
Laserlaite	NON guardare il facsio di luce ed evitare di esporsi alla fonte del
	laser. Il fascio di luce laser h emesso dal dispositivo di scansione
	del codice a barre.

**ATTENZIONE:** L'uso di comandi o regolazioni per eseguire le procedure che non siano quelli specificati in questa documentazione pur causare rischi all 'incolumit' delle persone.

### **Battery Statement**

CAUTION	This product contains a Lithium battery. The Dallas Semiconductor DS12B887 on the motherboard contains a Lithium battery. Lithium may be considered a hazardous material. Dispose of this battery in accordance with local, state, and federal laws.
LET OP	Dit product bevat een lithiumbatterij. De DS12B887-chip van Dallas Semiconductor op het moederbord bevat een lithiumbatterij. Lithium kan als gevaarlijk materiaal worden beschouwd. Werp de batterij weg in overeenstemming met de plaatselijke en landelijke milieuwetgeving.
VAROITUS	Tässä tuotteessa on litiumparisto. Emolevyllä oleva Dallas Semiconductor DS12B887 sisältää litiumpariston. Litium saattaa olla luokiteltu vaaralliseksi aineeksi. Hävitä tämä paristo paikallisten lakien ja määräysten mukaisesti.

ATTENTION	Ce produit contient une batterie au lithium. Le composant Dallas DS12B887 de la carte mère contient une batterie au lithium. Le lithium peut être considéré comme un produit dangereux. Rejetez cette batterie selon les règlements locaux, régionaux ou fédéraux.
ACHTUNG	Dieses Produkt enthält eine Lithium-Batterie. Der Dallas Halbleiter DS12B887 auf der Hauptplatine enthält eine Lithium-Batterie. Lithium gilt als speziell zu entsorgender Sondermüll. Bei der Entsorgung dieser Batterie müssen die entsprechenden lokalen, länder- und bundesweiten Gesetze und Regelungen betreffend Sammel- und Rückgabestellen beachtet werden.
Attenzione	Questo prodotto contiene una batteria al litio. Il modulo Dallas Semiconductor DS12B887 contiene una batteria al litio sulla scheda madre. Il litio può essere considerato un materiale pericoloso. Utilizzare questo tipo di batterie in accordo con le normative vigenti.
PRECAUCIÓN	Este producto contiene una batería de litio. El modelo Dallas Semiconductor DS12B887 de la placa base contiene una batería de litio. El litio puede ser considerado un material peligroso. Deseche la batería conforme a la normativa vigente de aplicación.
VARNING!	Denna produkt innehåller ett litiumbatteri. Dallas Semiconductor DS12B887 på moderkortet innehåller ett litiumbatteri. Litium kan betraktas som ett miljöfarligt ämne. När batteriet förbrukats, ska de lagar som gäller för miljöfarligt avfall respekteras.

	Glossary
$\int \int$	
A	<b>actuators</b> Robotic components that move inside the library to manipulate cartridges. These include the gripper, extension axis, vertical and horizontal axes.
	<b>automated tape library</b> A robotic storage and retrieval system for tape cartridges.
В	<b>bar code</b> A printed pattern of vertical bars of varying widths used for computerized inventory control.
	bar code label An identification label on tape cartridges.
	<b>bar code scanner</b> A device mounted on the extension axis that reads the cartridge bar code labels.
С	<b>calibration</b> Software measurements and configuration required for successful operation of the library.
	<b>control panel</b> A panel on the front of the library that contains indicators, controls, and a Status Display Area.
E	<b>EIA/TIA-574</b> A serial communications cabling and protocol standard for 9-pin connectors, sometimes referred to as RS-232.

	The diagnostic port (DIAG), on the rear of the library, uses this protocol.
	<b>extension axis assembly</b> Mounted onto the vertical axis, the extension axis assembly consists of the gripper assembly and the horizontal axis on which the gripper assembly is mounted.
	<b>extension axis belt</b> A drive belt connecting the extension motor/gearbox to the gripper assembly.
F	<b>FCC Class A</b> A standard established by the U.S. Federal Communications Commission governing electromagnetic emissions in a commercial environment.
	<b>FSA</b> Fixed Storage Array. A 3-column by 32-row fixture mounted inside the library. It hold up to 96 cartridges.
	FSE Field Service Engineer
G	<b>gripper assembly</b> An assembly that mounts on the extension axis and grips cartridges; referred to as the gripper.
н	<b>horizontal belt</b> A drive belt connecting the horizontal motor to the horizontal axis assembly.
	<b>host</b> <i>or</i> <b>host computer</b> A computer that issues SCSI commands to control the library robotics.
L	LCD Liquid Crystal Display.
	<b>load port</b> An operator accessible component that imports or exports cartridges from within the library.
М	<b>MTBF</b> Mean Time Between Failures.
	MTTR Mean Time To Repair.
N	<b>native mode</b> The uncompressed storage capacity of a tape subsystem. A TZ289N tape drive can store 35 GB in native mode and 70 GB with 2:1 compression.
	NVRAM Non-Volatile RAM.

0	off-line Ready for communication with a diagnostic computer.
	<b>on-line</b> Ready for communications with a host.
Р	<b>PC</b> Personal computer.
	<b>pick</b> The act of removing a cartridge from one location in preparation for placing it in another location.
	<b>place</b> The act of placing a cartridge in a location after it has been picked from another location.
	<b>PROM</b> Programmable Read-Only Memory.
Q	<b>Quantum</b>   <b>ATL 7100 Series Tape Library</b> An automated storage and retrieval component of an automated tape library system used for storing and handling cartridges.
R	RAM Random Access Memory.
	<b>rear panel</b> The rear cosmetic panel of the library. It contains an AC power switch, an AC power receptacle and various connectors for attaching external cabling to the library.
	<b>RS-232</b> A serial communications cabling and protocol standard for 9-pin connectors.
S	<b>SCSI</b> Small Computer System Interface, a communications standard for attaching peripheral equipment to computers.
	<b>SDA</b> Status Display Area. This is a 16-character, 2-line LCD display. It displays status messages that describe the operating state of the library. It also displays menu options when the library is in menu mode.
т	<b>tape drive</b> The mechanism that reads and writes data from and to a tape cartridge.
U	<b>UL</b> Underwriters Laboratories.

V vertical belt A drive belt connecting the vertical motor to the vertical axis assembly. vertical carriage assembly A crossbar and linear bearings mounted on the vertical rails and all components mounted on the crossbar. Ζ

**ZIF connector** Zero Insertion Force connector.



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