

Quantum ATL 7100 Series Library Unpacking Instructions

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Introduction

This document explains how to unpack the crate containing the Quantum | ATL 7100 Series library, an automated storage and retrieval system (see <u>figure 1</u>).

After completing the instructions in this booklet, perform the set up procedure using the instructions in the *Quantum*/*ATL* 7100 Series Library Facilities Planning and Installation Guide.

Figure 1 Quantum|ATL 7100 Series Library



Optional Cable Cover

The Quantum | Quantum | ATL 7100 Series library may include an optional cable cover. The cable cover ships in a separate box strapped on top of the Quantum | ATL 7100 Series crate. For information on this optional item, refer to the *Quantum* | *ATL 7100 Series Cable Cover Installation Instructions* in the cable cover shipping box.

Selecting an Installation Location

When choosing an installation site for the library, consider the following requirements:

- Floor space
- Floor clearance
- Floor strength and inclination
- Power and grounding
- Environmental conditions

Floor Space

The Quantum | ATL 7100 series library requires over 2 ft. of open floor space around the entire unit (see <u>figure 2</u>).



Floor Clearance

The library has a floor clearance of 0.75 inch (19 mm).

Floor Strength, Inclination, and Characteristics	 The floor at the installation site must be rated at 250 lb/ft² (1221 kg/m²). This is sufficient to support a fully loaded Quantum ATL 7100 Series library. The floor must be level to within 0.25 inch (6.4 mm) over a 6-foot-by-6-foot (1.83-meter-by-1.83-meter) area. The floor at the installation site must be uncorrected and free of defects. 		
Power and Grounding	The floor at the installation site must be uncarpeted and free of de bunding The power inlet is an IEC-320 connector (see <u>figure 3</u>). Outside N America, replace the power cord with a harmonized 3 x 2 mm ² per cord that is approved by the country where used.		
	Caution: To prevent equipment damage, or grounded electrical outlet.	connect the library to a	
Figure 3 Library Power Receptacle	Ground	IEC-320 Type ~100-120V/~200 - 240V 3.5A/7A 50/60 Hz 4A/2A	
	Line	Neutral	
Environmental Conditions	The installation site must have the following environmental conditions:		
	• Humidity: 10% to 90%		
	• Temperature: 15° C to 32° C (59° F to 90° F)		
	• Altitude: sea level to 13,200 feet (4.023 km)		
	These environmental conditions only apply when the library is in operation.		
	Note: For additional library specifications (including environmental requirements during shipping and storage), refer to the <i>Quantum/ATL 7100 Series Library Facilities Planning and Installation Guide</i> .		

Preparing for the Installation

Use the following steps to prepare for the installation:

- Providing necessary tools and equipment
- Taking ESD precautions

Providing the Necessary Tools and Equipment Provide the following tools for leveling the library:

- 3/4-inch open-end wrench
- Level

Taking ESD Precautions Some components within the Quantum | ATL 7100 Series library contain static-sensitive parts. To avoid damaging these parts while performing installation procedures, always observe the following precautions:

- Do not switch on the library during installation procedures.
- Keep the library power cord connected to a grounded power outlet except when working with AC electrical components.
- Avoid contact with power supplies, EMI filters, and AC electrical components while the library is connected to a power outlet.
- Use an antistatic wrist strap.
- Keep static-sensitive parts in their original shipping containers until ready for installation.
- Do not place static-sensitive parts on a metal surface. Place them inside their protective shipping bag or on a grounded antistatic mat.
- Avoid touching connectors and other static-sensitive components.
- Keep library doors and access panels closed whenever possible.

Note: Dry climates and cold-weather heating environments have lower relative humidity and are more likely to produce static electricity.

Unpacking the Library

This section explains how to unpack the library and move it to its installation location. The following are the major steps in this section:

- Receiving the library
- Unboxing the library
- Checking the packing list
- Positioning the library

Note: Before following the instructions in this section, verify the installation site meets the requirements found in "Selecting an Installation Location" on page 4 of this document.

Receiving the Library

Inspect the shipping pallet and carton for damage that may have occurred during shipment. Report any damage to the shipper.

Warning: The library weighs approximately 500 pounds (227 kg). Use at least two people to unpack, move, and install the library.

Unpack the Library

To unpack the library:

1 Verify the minimum floor space requirements (see <u>figure 4</u>).

Note: Unpacking the crate requires a minimum of 8 feet (2.44 meters) in front of the library, and adequate space at the sides and back for two people to maneuver.



- **3** If the optional cable cover is included:
 - Remove the cable cover box from the top of the library.
 - Set the cable cover box aside.
 - Refer to the Quantum | ATL 7100 Series Cable Cover Installation Instructions to install the cable cover.
- **4** Cut the two steel bands that secure the cardboard box to the pallet.
- 5 Lift the box top straight up and off the cardboard box (see <u>figure 6</u>).
- 6 Open the four retaining clips on the rear of the cardboard box.
- 7 Unwrap and remove the cardboard box from the library.



- 8 Lift the accessories tray up and off the library (see <u>figure 7</u>).
- **9** Lift the foam cap up and off the library (see <u>figure 7</u>).
- **10** Remove the two screws that secure the stop block. The stop block is located under the library in front of the casters.

Figure 6 Removing the Cardboard Box

11 Remove the stop block.



- **12** Pull the two ramp extensions out from under the library (see <u>figure 8</u>).
- **13** Secure the ramp extensions to the pallet using the Velcro straps.
- **14** Carefully cut the shipping bag along the heat-seal seam (see <u>figure 8</u>.



Figure 9 Leveling Feet



4 Using two people, carefully wheel the library out of the shipping bag and down the ramp.

Caution: When maneuvering the library, do not push on nonstructural features (see <u>figure 10</u>).



5 Roll the library to the final installation area.

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Figure 10

Nonstructural Features

Installation Procedures

This section explains how to unpack the library's internal packing materials and prepare it for installation. The following are the major steps in this procedure:

- Removing the internal packing materials
- Storing the shipping materials
- Leveling the library

Removing the Internal Packing Materials	To remove the internal packing material from the library:
	1 Remove the packing material from the load port door (see <u>figure 11</u>):
	a Open the load port door.
	b Remove the foam sheet.
	c Close the load port door.
	2 Remove the packing material from the drive access door (see <u>figure 11</u>):
	a If necessary, unlock the drive access door.
	b Open the drive access door.
	c Remove the foam sheet.
	d Close the drive access door.
	3 Remove the packing material from the front door by using the procedure in step 2.
	4 Remove the packing material from the storage array door:
	a If necessary, unlock the storage array door.
	b Open the storage array door.
	c Remove the foam sheet.



- **5** Remove the tie wraps from the robotics area (see <u>figure 12</u>):
 - **a** Remove the tie wrap that secures the gripper.
 - **b** Remove the tie wrap that secures the horizontal carriage assembly to the library frame.

Note: Do not cut the tie wraps.



- **6** Remove the internal packing material (see <u>figure 13</u>):
 - **a** Remove the horizontal carriage tie wrap.
 - **b** Gently raise the extension axis assembly.
 - c Remove the vertical axis packing block.
 - **d** Gently push the carriage assembly toward the front of the library.
 - e Remove the horizontal axis packing block.
 - f Lower the extension axis to the floor of the library.



Leveling the Library	To level the library:
	1 Lower each foot of the library until it makes contact with the floor (see <u>figure 9</u>).
	2 Apply a 1/4 turn clockwise with the open-end wrench to tighten each foot against the floor.
	3 Center a carpenter's level on the top front edge of the library.
	4 Check the gauge on the level. If the front of the library is level, go to the next step. If it is not level:
	a Determine the tilt of the library.
	b Lower the foot on the low side by applying a 1/4 turn with the open-end wrench.
	c Repeat until the front is level.
	5 Repeat the previous step for all edges of the library.
	6 Recheck the level on all top edges.
	To continue installation procedures, refer to the <i>Quantum</i> <i>ATL</i> 7100 Series Facilities Planning and Installation Guide.