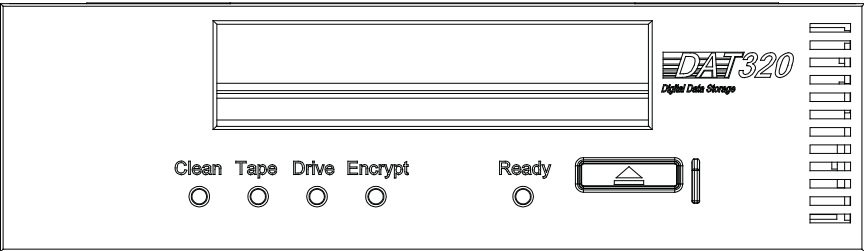


DAT 320 Tape Drive Quick Start Guide

Quantum DAT 320, models CD320UH (Internal) and CD320UE (Tabletop), are the most reliable DAT drives on the market, delivering reliability features to extend media life.

Figure 1 Internal Drive



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Before Installing the DAT 320 Tape Drive in Your System

Avoiding Electrostatic Damage

Your internal tape drive has very sensitive components that are prone to damage from electrostatic discharge (ESD). Use extreme care when handling the drive, as it can be damaged by ESD.

Before handling the drive, read the ESD instructions that follow to prevent damage to the drive.

- Wear an ESD-preventive grounding wrist strap or observe similar ESD precautions when working with the drive. Be sure the wrist strap makes good skin contact. Do not remove the wrist strap until you finish working with the drive.
- Before you remove the drive from the antistatic bag, touch a metal or grounded surface to discharge any static electricity buildup from your body.
- Avoid contact between the drive, other equipment, and clothing. The wrist strap only protects the equipment from ESD voltages on the body; ESD voltages on clothing can still cause damage.
- When the drive is not being used, keep it in its antistatic bag.
- Hold the drive by its edges only. Avoid touching any exposed parts on the printed circuit board.
- Always place the drive on top of or inside the antistatic bag to reduce the chance of ESD damage

Preinstallation Requirements

In addition to the contents included with your internal tape drive, you need the following items to install your internal tape drive.

- A USB 2.0 port
- 5.25-inch half-height bay (for internal drive)
- Backup application software that supports the internal tape drive. For a list of the latest backup software applications tested with the internal DAT 320 tape drives, please visit our Web site at <http://www.quantum.com/ServiceandSupport/Index.aspx#>

Unpacking and Inspecting the Drive

Before you unpack the contents of your drive package, inspect the shipping containers for damage. If you spot damage to the container, notify your carrier immediately.

When you unpack the package, compare the items received with those on the packing list. If any item is missing or damaged, please contact your place of purchase immediately.

Required Tools

The following is a list of the tools you will need. You may need additional items, depending on your installation requirements.

- Flat blade, Phillips or TORX screwdriver, depending on the type of screws used by your computer

Installing the Internal DAT 320 Tape Drive in Your Server

Installing the internal DAT 320 tape drive consists of the following major steps:

- [Preparing Mounting Bay](#)
- [Attaching Mounting Hardware](#)
- [Installing the Tape Drive](#)
- [Attaching the USB Cable](#)
- [Connecting the USB Cable from the Tape Drive to the Server](#)
- [Attaching the Power and USB Cables to the Tape Drive](#)
- [Securing the Drive](#)

Preparing Mounting Bay

Caution: To avoid personal injury or damage to the server or tape drive, ensure that the server is disconnected from the main power supply while you install the drive.

- 1 Assemble the necessary tools and materials:
 - Phillips screwdriver
- 2 Perform a normal system shutdown and turn off the server and any connected peripherals.
- 3 Remove the cover and front panel from the server, as detailed in your server's documentation.

As you work inside the server, you may have to disconnect other signal cables or power cables from other devices to maneuver the new drive into place. If you have to do this, make a note of their position and connections so you can put them back correctly later.

- 4 You are now ready to install your tape drive.

Attaching Mounting Hardware

If your server requires special rails or other hardware to install the tape drive, mount them on the tape drive now. If your server does not require special mounting hardware, proceed to [Installing the Tape Drive](#).



Caution: Static electricity can damage electronic components. Always wear an antistatic wrist strap if one is available. If not, after you have disconnected power from the server and removed the cover, touch a bare metal part of the chassis. Similarly, touch a bare metal part of the drive before installing it.

Note: If mounting hardware is supplied with your tape drive, it may not be exactly the same as shown in the illustrations.

Different models of server require different mounting methods. The server may also incorporate a locking mechanism to hold the tape drive in place.

Please check your server documentation to ascertain the correct method of mounting and to check whether mounting hardware is provided with the server.

Mounting Rails

Some servers require mounting rails. These may be metal or plastic rails attached to the filler panel of the server's drive bay.

- 1 Use a regular Phillips screwdriver to attach the appropriate rails. Use M3 screws 5 mm (0.2 in).

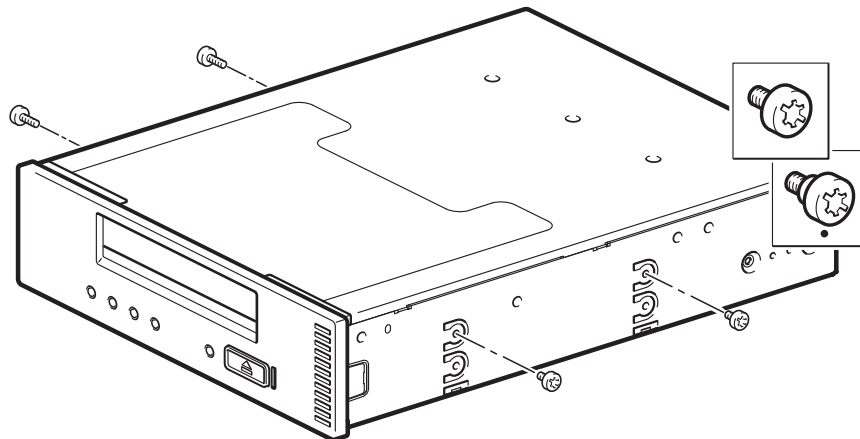
Ensure you have the M3 screws. The rails may be attached to the filler panel by screws of a different thread/size type and these should not be used. If in doubt, refer to your server documentation.

Mounting Screws

Other server models only require the use of special locating screws with no mounting rail.

- 1 Use a screwdriver to attach the appropriate screws. You may need to purchase the M3 screws separately. Position the screws (see [Figure 1](#)).

Figure 1 Attaching Mounting Screws



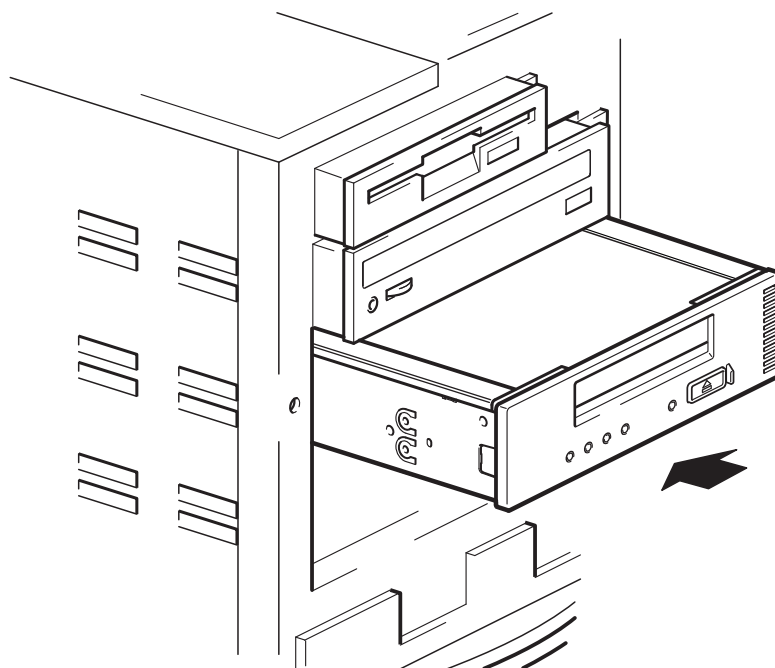
- 2 Attach the appropriate mounting hardware. Refer to the manufacturer's documentation for instructions.
 - If you are installing on a server that requires a tray, place the tape drive in the tray.
 - If you are installing in a server that requires mounting rails, fasten the rails to the tape drive.
 - Some servers have snap-on mounting rails attached to the filler panel. These can be removed and attached to the tape drive with screws.

Installing the Tape Drive

To install the tape drive:

- 1 Slide the tape drive into the open bay aligning the tray or rails with the slots in the bay (see [Figure 2](#)).

Figure 2 Installing the Tape Drive



If your server does not use mounting hardware, check that the holes in the chassis are aligned with the holes in the side of the tape drive.

Do not secure the drive at this point because you may have to move the drive to get the cables into place.

Attaching the USB Cable

Decide Which Cable to Use

There are several options for connecting the tape drive to your server:

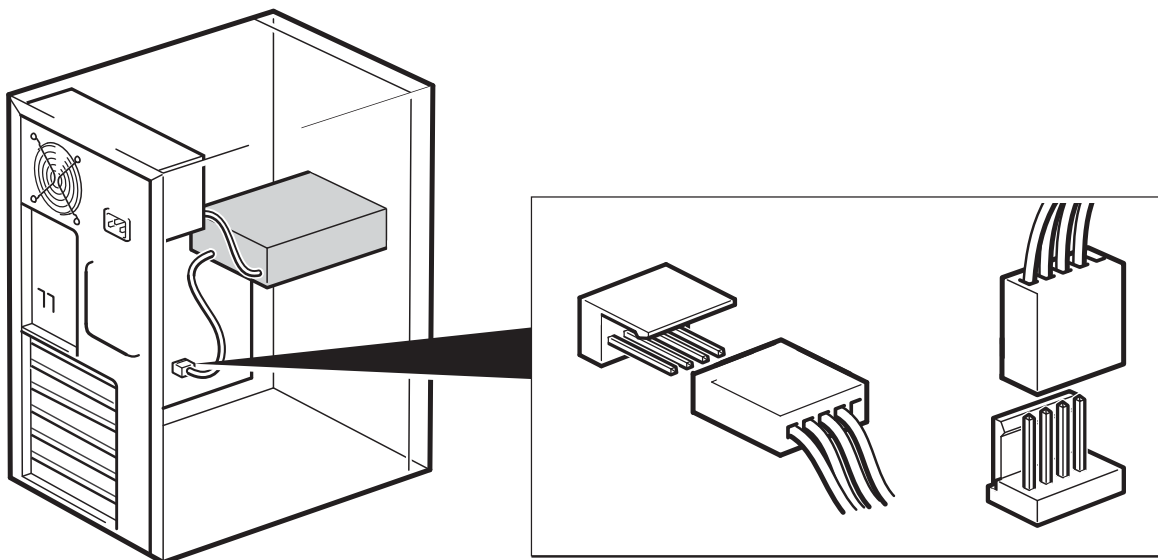
To an . . .	Use . . .	Notes
Internal standard USB port	standard USB cable	May be connected to the server's system board or an internal USB card.
External USB port	standard USB cable	Cable routing kit is required.

Connecting the USB Cable from the Tape Drive to the Server

To an Internal USB 2.0 Port

- 1 Use the schematic on the inside of the server panel to check whether your server has an internal USB 2.0 port and locate its position.
- 2 Use the appropriate cable to connect to the server.
 - A standard 5-pin USB Type B cable is provided with the tape drive (see [Figure 3](#)).

Figure 3 Connecting to an Internal USB Port

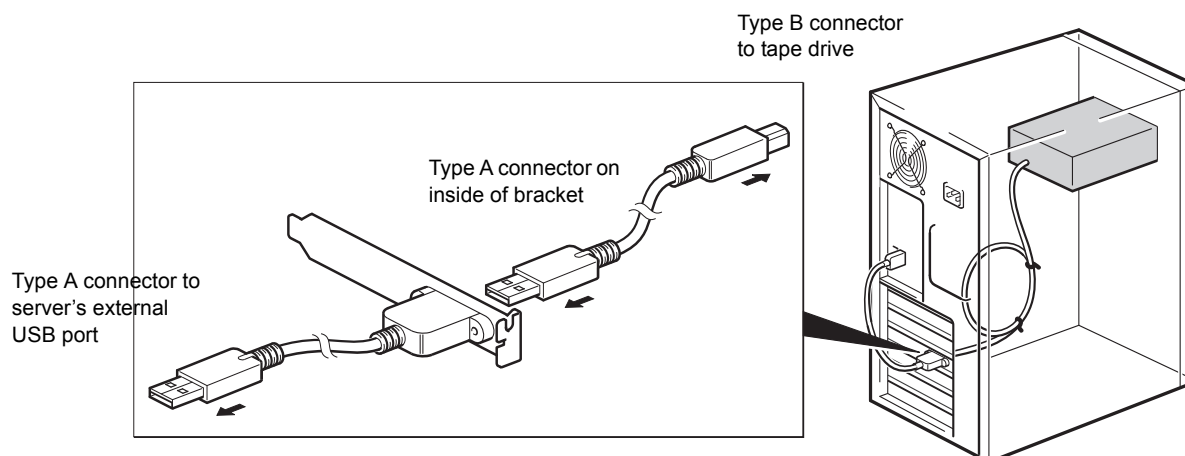


To an External USB 2.0 Port

Purchase a special USB cable and Cable Routing Kit. The Cable Routing Kit consists of a bracket with attached cable on one side that connects to the server's external port and a Type A USB socket on the other side. Make sure you orientate the bracket correctly when you fit it (see [Figure 4](#)).

- 1 Remove a spare blanking plate from the rear panel of the server.
- 2 Fit the bracket with attached the cable and fix it to the server. Make sure the cable is outside of the server and connect it to the server's external USB port (see [Figure 4](#)).
- 3 Attach the standard USB cable to the bracket (type A connector) (see [Figure 4](#)).

Figure 4 Connecting the USB Cable



Attaching the Power and USB Cables to the Tape Drive

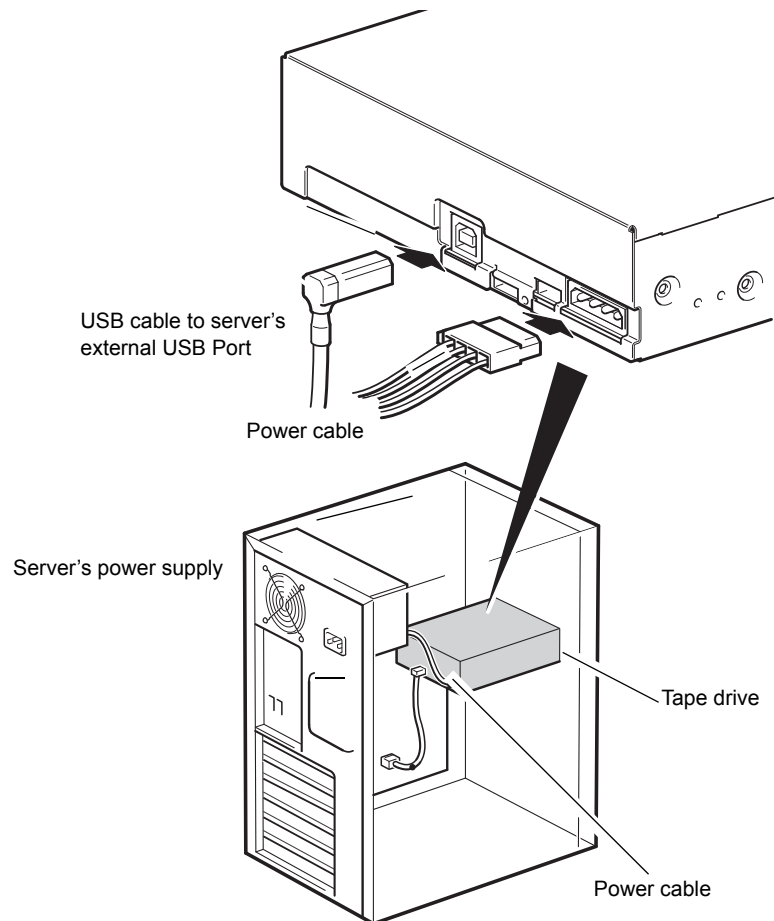
Note: The drive is not powered from the USB bus. It must be connected to the server's power supply.

- 1 Attach the USB cable to the tape drive (Type B connector).



- 2 Attach a spare cable from the server's internal power supply to the power connector (see [Figure 5](#)).

Figure 5 Attaching the Power Cable



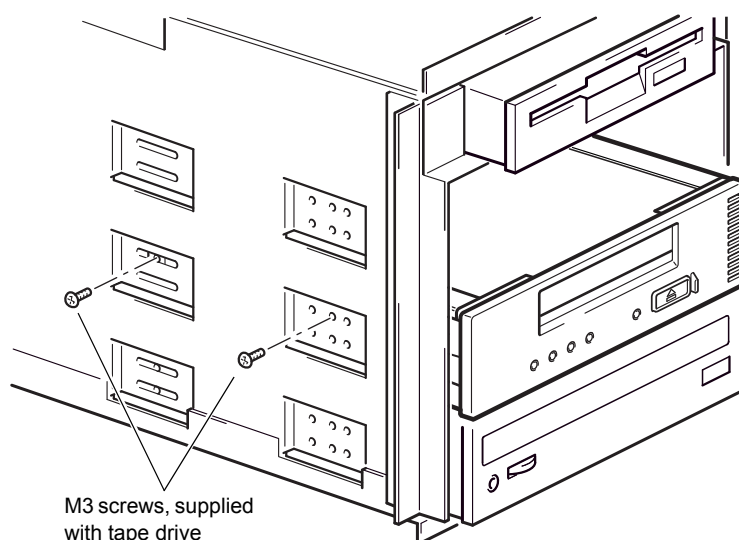
Securing the Drive

Note: The server latches and side views of your server model may not be exactly the same as shown in the illustrations. Please refer also to your server documentation.

Mounting Hardware Used

- 1 Use M3 screws. Check that the holes in the chassis are aligned with the holes in the sides of the drive and use a regular Phillips screwdriver to secure the M3 screws (see [Figure 6](#)).

Figure 6 Securing Drive, No Mounting Hardware Used



- 2 Ensure blanking plates are in place over empty bays and replace the cover on the server.

Completing Your Installation

To complete and test your internal tape drive installation:

- 1 Use the screws you removed earlier to secure the drive in place.
- 2 Replace the computer cover.
- 3 Reconnect the power cord to the computer's power connector.
- 4 Turn on the computer.
- 5 If necessary install the DAT320 O/S driver.
- 6 Install your backup software program. The documentation that came with your software should describe this procedure.
- 7 Gently insert a tape cartridge into the internal tape drive's slot. Slide the cartridge into the slot until the drive accepts the cartridge and loads it. A brief delay occurs while the drive identifies the cartridge type and state, and moves the tape to the data area. Then the green Ready LED goes ON.
- 8 Use your backup software application to perform a sample backup-and-verify operation. The Ready green LED flashes as data is written to and/or read from the tape.
- 9 At the end of the operation, press the **Eject** button on the front of the internal tape drive to eject the cartridge from the drive.



Installing the Tabletop DAT 320 Tape Drive to Your System

Installing the tabletop DAT 320 tape drive consists of the following major steps:

- [Connecting the Power and USB Cables to Your Tabletop Drive](#)
- [Completing Your Installation](#)

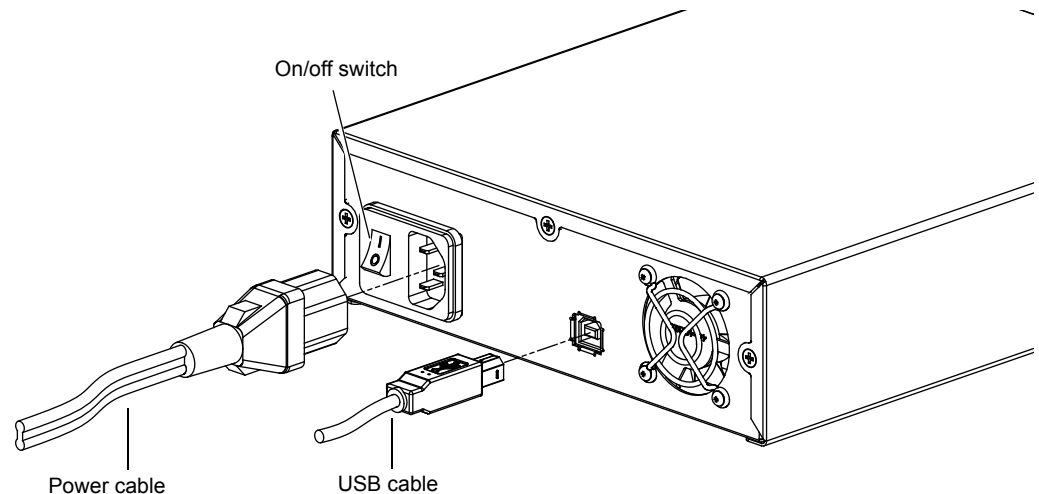
Connecting the Power and USB Cables to Your Tabletop Drive

Note: The drive is not powered from the USB bus. It must be connected to the main power supply.

A power cable is provided with your Quantum DAT 320 tape drive.

- 1 Make sure that the drive is switched OFF (O side down). The power switch is on the rear panel.
- 2 Connect the USB cable to the USB connector on the back of the enclosure.
- 3 Plug the power cable securely into the socket on the rear panel of the drive and plug the other end of the power cable into the power outlet.

Figure 7 Connecting Power and USB Cables



- 4 Plug the USB cable into the USB connector on the server.

Note: It is important to ensure that you connect your drive to a USB 2.0 port. The drive will work on a USB 1.1 port but performance will be severely degraded.

Completing Your Installation

To complete and test your tabletop tape drive installation:

- 1 Use the On/Off Switch on the back of the tabletop tape drive to turn on the drive (see [Figure 7](#)). The Ready LED should be ON, the other three front-panel LEDs should be OFF.

- 2 Turn on the computer.
- 3 If necessary install the DAT320 O/S driver.
- 4 Install your backup software program. The documentation that came with your software should describe this procedure.
- 5 Gently insert a tape cartridge into the tabletop tape drive's slot. Slide the cartridge into the slot until the drive accepts the cartridge and loads it. A brief delay occurs while the drive identifies the cartridge type and state, and moves the tape to the data area. Then the green Ready LED goes ON.
- 6 Use your backup software application to perform a sample backup-and-verify operation. The green Ready LED flashes as data is written to and/or read from the tape.
- 7 At the end of the operation, press the **Eject** button on the front of the tabletop tape drive to eject the cartridge from the drive.

Registering Your Tape Drive

After you install the tape drive, be sure to register it. Registering your drive ensures that you will receive the latest information about your drive, as well as other product, service, and support information. For your convenience, you can register your drive through our Web site.

- Please visit www.quantum.com/registration to register your product.

Safety Compliances

The DAT 320 Tape Drives are safety compliant with the following regulatory organizations and codes in the countries indicated:

Country	Regulatory Organization	Compliant to:
US / CANADA	Underwriters Laboratories UL or Canadian Standards Association CSA	UL/CSA 60950-01, 2nd Ed.
EU member nations	Comité Européen de Normalisation Electrotechnique – the European Committee for Electrotechnical Standardization (CENELEC)	EN 60950-1 :2006+A11:2009



Country	Regulatory Organization	Compliant to:
IECEE member nations*	IECEE International Electrotechnical Commission on Electrical Equipment (IECEE) for Mutual Recognition of Test Certificates for Electrical Equipment "CB Scheme"	CB Scheme per IEC 60950-01, 2nd Ed. with details and exceptions for each member country
Taiwan	BSMI	BSMI certification, CNS 14336

* IECEE member nations include: Austria, Australia, Belgium, Brazil, Canada, China (PR), Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Netherlands, Norway, Poland, Singapore, Slovakia, Slovenia, Spain, Switzerland, United Kingdom, and USA.

Jotta asiakasta Suomessa

Laite on liitettava suojakosketinpistorasiaan

For kunder i Norge

Apparatet må tilkoples jordet stikkontakt

Dette produktet kan tilkobles et IT strøm distribusjonssystem

För kunder i Sverige

Apparaten skall anslutas till jordat uttag

Electromagnetic Compatibility (EMC) Compliances

The DAT 320 Tape Drives are EMC compliant with the following regulatory organizations and codes in the countries indicated:

Country	Regulatory Organization	Compliant to:
Australia/New Zealand	Australian Communications and Media Authority (ACMA)	AS/NZA 3548 (same as CISPR 22)
Canada	Industry Canada Digital Apparatus - Interference - Causing Equipment Standard (ICES-003)	ICES-003 Digital Apparatus
EU member nations	CE	Emissions per CISPR 22, EN55022 and Immunity per CISPR 24, EN55024
Japan	Voluntary Control Council for Interface (VCCI)	VCCI

Country	Regulatory Organization	Compliant to:
Taiwan	Bureau of Commodity Inspection and Quarantine (BSMI)	BSMI EMC certification, CNS 13438
United States	Federal Communications Commission (FCC)	Title 47: Code of Federal Regulations, Part 15, Subpart B (47CFR15B)

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Note: Use these drives only in equipment where the combination has been determined to be suitable by an appropriate certification organization (for example, Underwriters Laboratories Inc. or the Canadian Standards Association in North America).

You should also consider the following safety points:

- Install the drive in an enclosure that limits the user's access to live parts, gives adequate system stability, and provides the necessary grounding for the drive.
- Provide the correct voltages (+5 VDC and +12 VDC) based on the regulation applied—Extra Low Voltage (SEC) for UL and CSA, and Safety Extra Low Voltage for BSI and VDE (if applicable).



For assistance, contact the Quantum Customer Support Center:

USA: **800-284-5101 (toll free) or 949-725-2100**

EMEA: **00800-4-782-6886 (toll free) or +49 6131 3241 1164**

APAC: **+800 7826 8887 (toll free) or +603 7953 3010**

Worldwide: **<http://www.quantum.com/ServiceandSupport>**

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About Quantum

Quantum Corp. (NYSE:QTM) is the leading global storage company specializing in backup, recovery and archive. Combining focused expertise, customer-driven innovation, and platform independence, Quantum provides a comprehensive range of disk, tape, media and software solutions supported by a world-class sales and service organization. This includes the DXi™-Series, the first disk backup solutions to extend the power of data deduplication and replication across the distributed enterprise. As a long-standing and trusted partner, the company works closely with a broad network of resellers, OEMs and other suppliers to meet customers' evolving data protection needs.