

# QuantStudio™ Absolute Q™ Digital PCR System

Publication Number MAN0026431 Revision A.0

This guide contains the information that is needed to prepare your site for installation of a QuantStudio™ Absolute Q™ Digital PCR System.

## Site preparation workflow

**IMPORTANT!** Thermo Fisher Scientific does not install, service, or repair products in areas designated BioSafety Level 3 (BSL-3) or BioSafety Level 4 (BSL-4).

A Thermo Fisher Scientific service representative will contact you to schedule the installation. When the installation date is scheduled, perform the following tasks.

### Site preparation workflow

#### Review this site preparation guide



#### Complete the site preparation checklist (page 2)

Complete, date, and initial all items in the checklist before the scheduled installation date.



#### Receive and inspect the shipment (page 18)

- Verify items ordered were shipped.
- Inspect the shipping containers and report any damage.
- Unpack the installation kit and store as directed.



#### Shipper moves the crated shipment to the installation site (page 18)

- Prepare the installation site.
- Move the crated instrument to the site.

## Site preparation checklist


**IMPORTANT!** Complete, date, and initial all items in the following checklist before the scheduled installation date. If the site preparation checklist is not complete when the Thermo Fisher Scientific service representative arrives, the scheduled installation can be postponed.

✓	Date	Initials	Site preparation requirement	See page
<input type="checkbox"/>			Customer responsibilities have been reviewed.	3
<input type="checkbox"/>			Personnel have been assigned tasks and responsibilities.	
<input type="checkbox"/>			The installation site is identified and meets requirements:	
			<input type="checkbox"/> Space and clearance	5
			<input type="checkbox"/> Environmental	6
			<input type="checkbox"/> Electrical	7
			<input type="checkbox"/> Network	9
			<input type="checkbox"/> Safety	10
<input type="checkbox"/>			All materials needed for installation and operation are available.	17
<input type="checkbox"/>			The instrument was received and inspected as follows:	18
			<input type="checkbox"/> All items on the shipping list are the same items ordered at the time of purchase.	
			<input type="checkbox"/> Damage to shipping containers was reported to the shipping company that delivered the shipment and to your service representative.	
			<input type="checkbox"/> Damage or mishandling was recorded on the shipping documents.	
<input type="checkbox"/>			<input type="checkbox"/> If provided with the shipment, all reagents and plates are unpacked and stored as specified on package labels.	
<input type="checkbox"/>			The installation site is cleared and ready for instrument installation.	18
<input type="checkbox"/>			The packaged shipping containers are moved to the installation site by the shipper.	
<input type="checkbox"/>			All materials for installation, qualification, and operation are available.	17

## Customer responsibilities

Personnel	Responsibilities
Site preparation/ installation coordinator	<ul style="list-style-type: none"> <li>• Reviews the site preparation guide for site requirements.</li> <li>• Coordinates personnel and tasks.</li> <li>• Selects the installation site.</li> <li>• Reviews checklists with applicable personnel to verify that the site is properly prepared.</li> <li>• Reviews checklists with the service representative to verify that the site is properly prepared.<sup>[1]</sup></li> <li>• Receives and inspects the packaged shipment.</li> <li>• Unpacks and stores the reagents box (if provided) according to the specifications indicated in the product information sheets.</li> <li>• Schedules the installation and informs personnel of the installation day.</li> <li>• Ensures that the site is clear of unnecessary material on the installation day.</li> <li>• Is available to assist the service representative throughout installation.</li> </ul>
Laboratory safety representative	<ul style="list-style-type: none"> <li>• Reviews the site preparation guide for safety information.</li> <li>• Ensures that the required safety practices and equipment are in place.</li> <li>• Is in the vicinity and available to the service representative at all times while the service representative is at the customer's facility.</li> </ul>
Laboratory personnel/ primary users	<ul style="list-style-type: none"> <li>• Reviews safety information.</li> <li>• Ensures that all customer-provided materials for installation are present at the site.</li> <li>• Ensures that primary users (responsible for training other users) are available during the installation, so that they can be trained on the instrument.</li> </ul>
Facilities personnel	<ul style="list-style-type: none"> <li>• Ensures that the installation requirements are met for: <ul style="list-style-type: none"> <li>– Space at the installation site</li> <li>– Building clearances</li> <li>– Temperature and humidity</li> <li>– Waste collection</li> <li>– Electrical supply</li> <li>– Safety and installation materials</li> </ul> </li> <li>• If possible, coordinates the move and placement of the QuantStudio™ Absolute Q™ Digital PCR System on the bench with the shipper before the installation date.</li> <li>• Is available to assist service representative and laboratory personnel.</li> <li>• If applicable, ensures that at least two people are available to help the service representative move and position the instrument.</li> </ul>

(continued)

Personnel	Responsibilities
Network or IT specialist (if the dedicated computer will be connected to a network)	<ul style="list-style-type: none"> <li>• Ensures that active, tested local area network (LAN) connections are in place before the scheduled installation date.</li> <li>• Ensures that network hardware is compatible with an RJ45-type connector.</li> <li>• If necessary, supplies additional cables.</li> <li>• Is available during installation to connect the dedicated computer to the network.</li> </ul> <p> <b>CAUTION!</b> Do not connect the product components to the network before the service representative arrives.</p>

<sup>[1]</sup> Required for service representative installation of the instrument.

## Site requirements

### Dimensions and weights

To prepare for installation, provide space for receipt and configuration of the components listed in this section. This section provides dimensions and weights for the packages you will receive, and it describes the dimensions of the components after installation and configuration.

#### Crates and packages



**WARNING! PHYSICAL INJURY HAZARD.** Do not attempt to lift or move the crated instrument without professional assistance. The crated instrument is heavy. Any incorrect lifting or moving of the crated instrument can cause serious injury.

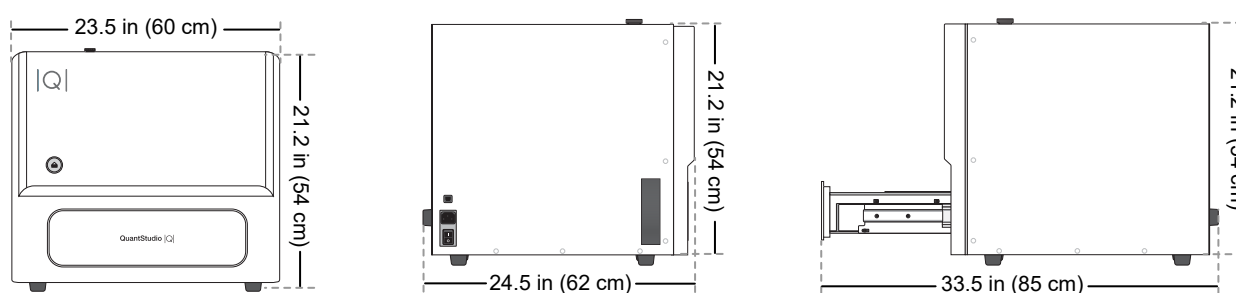
Ensure that the building clearances allow for the passage of the instrument crates and packages.

Crate/package	Height	Length (depth)	Width	Weight
QuantStudio™ Absolute Q™ Digital PCR Instrument	30 in (79 cm)	33.5 in (86 cm)	34 in (86.4 cm)	140 lb (63.5 kg)
Dell™ Tower	15 in (38.1 cm)	13 in (33.02 cm)	19 in (48.26 cm)	13 lb (5.89 kg)
Dell™ Monitor	14 in (35.6 cm)	6.5 in (16.5 cm)	23 in (58.42 cm)	10 lb (4.53 kg)

## Components (unpackaged)

Ensure that the installation bench space is level and can accommodate the dimensions of the equipment.

Component	Height	Length (depth)		Width	Weight
		Plate tray open	Plate tray closed		
QuantStudio™ Absolute Q™ Digital PCR Instrument	21.2 in (54 cm)	33.5 in (85 cm)	24.5 in (62 cm)	23.5 in (60 cm)	132 lb (60 kg)



**Figure 1** Instrument dimensions

Front, side, and drawer open views



**WARNING! PHYSICAL INJURY HAZARD.** Do not attempt to lift or move the instrument without professional assistance. The instrument is heavy. Any incorrect lifting or moving of the instrument can cause serious injury.

Component	Height	Depth	Width	Weight
Dell™ Tower	14 in (35.6 cm)	12 in (30.5 cm)	6 in (15.2 cm)	13 lb (5.89 kg)
Dell™ Monitor	14 in (35.6 cm)	6.5 in (16.51 cm)	20.5 in (52.07 cm)	10 lb (4.53 kg)

## Instrument clearances

During instrument setup and maintenance, it is necessary to access the back and sides of the instrument. If the back of the instrument faces a wall, there must be enough space to rotate the instrument on the bench to enable access to the back of the instrument.

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**IMPORTANT!** For safety, the power outlet that is used for powering the instrument must be accessible at all times.

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Component	Top	Front	Left/right	Back
QuantStudio™ Absolute Q™ Digital PCR Instrument	18 in (45.72 cm)	10 in (25.4 cm)	6 in (15.2 cm)	6 in (15.2 cm)

## Installation and environmental requirements

The room where the instrument is installed must be kept within the following operational environment conditions.

Condition	Acceptable range
Installation site	For indoor laboratory use only (Applicable pollution degree 2)
Operating temperature and humidity	15-30°C (60-85°F), 0-80% RH
Storage temperature and humidity	5-40°C (40-105°F), 0-80% RH
Vibration	Do not place the instrument adjacent to strong vibration sources. Excessive vibration during use can affect instrument performance.
Altitude	Up to 6,500 ft (2000 m)
Input voltage tolerance	+/-10%
Over voltage category	II

- Installation time: <10 minutes
- Required materials: scissors or a strap cutter
- Space requirement: The instrument is approximately 0.6 m (2 ft) cubed. The presentation drawer must not be obstructed and extends approximately 200 mm (8 in) from the front panel of the instrument when open. The power and USB connections are on the left side near the back of the instrument.
- Ensure that the fan vents on the back and bottom of the instrument are not obstructed.

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**IMPORTANT!** Keep all packaging materials in good condition, as they are required if the instrument needs to be returned for any reason.

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**WARNING!** The instrument requires 2–3 people for moving. Moving the system alone may result in serious injury.

## Ventilation requirements

Do not block air inlets or outlets that allow proper ventilation. Do not place anything under the instrument as this will block ventilation to the bottom of the instrument. For information on clearances for instrument ventilation, see “Instrument clearances” on page 6.

## Electrical requirements



**WARNING!** Do not unpack or unplug any components until they are configured for the proper operating voltage by the service representative.



**WARNING!** For safety, the power outlet used for powering the instrument must be accessible at all times. See “Instrument clearances” on page 6 for information about the space needed between the wall and the instrument. In case of emergency, you must be able to immediately disconnect the main power supply to the instrument. Allow adequate space between the wall and the equipment so that the power cord can be disconnected in case of emergency.

- Electric receptacle required: 2-prong with ground pin
- Mains AC line voltage tolerances can be up to  $\pm 10\%$  percent of nominal voltage
- Use only the specified power cable supplied with the instrument to connect the sequencer to a wall receptacle. Route the power cord away from the workspace to avoid accidental disconnection.

Component	Input voltage	Frequency	Rated current <sup>[1]</sup>
QuantStudio™ Absolute Q™ Digital PCR System	100-240 VAC	50/60 Hz	12–8.5A

<sup>[1]</sup> Based on rated current at minimum input voltage.

A power cord is provided with the instrument. If not suitable for installation in your region, ensure any power cord you do use is:

- Maximum 10 ft (3 m) in length
- Grounding type
- Compatible with the power supply receptacles used to connect to main power
- Suitable for the rating of the instrument and mains power supply
- Compliant with local safety requirements (for example, UL Listed for North America, JIS approved for Japan, HAR or agency certified for Europe)

## Cleaning or decontamination

See the user documentation for your QuantStudio™ Absolute Q™ Digital PCR System for information on how to clean or decontaminate the instrument.

Use only the cleaning agents as described in the user documentation for your QuantStudio™ Absolute Q™ Digital PCR System. Use of cleaning agents that are not described in user documentation can impair the instrument. Contact Technical Support if you have questions.

Wipe off any liquid on or near the instrument using a lint-free tissue.

## Disposing of waste



**WARNING! CHEMICAL HAZARD.** Refer to Safety Data Sheets (SDSs) and local regulations for handling and disposing of plastic consumables. Follow local municipal waste ordinances for proper disposal provisions to reduce the environmental impact of plastic consumables.



**WARNING! CHEMICAL HAZARD.** Before handling chemicals, refer to the Safety Data Sheet (SDS) provided by the manufacturer, and observe all relevant precautions.



**WARNING! CHEMICAL HAZARD.** All chemicals in the instrument, including liquid in the lines, are potentially hazardous. Always determine what chemicals have been used in the instrument before changing reagents or instrument components. Wear appropriate eyewear, protective clothing, and gloves when working on the instrument.



**WARNING! CHEMICAL HAZARD.** Waste produced by instruments can be hazardous and can cause injury, illness, or death.


## Electrical protective devices

We recommend several protective devices to protect the system in environments with large voltage and power fluctuations.

Device	Description
Power line regulator	<p>We recommend the use of a 2.5-kVA power line regulator in areas where the supplied power fluctuates in excess of <math>\pm 10\%</math> of the normal voltage. Power fluctuations can adversely affect the function of the instrument and computer.</p> <p><b>Note:</b> A power line regulator monitors the input current and adjusts the power supplied to the instrument or computer. It does not protect against a power surge or failure.</p>



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Device	Description
Uninterruptible power supply (UPS)	<p>We recommend the use of a 2.5-kVA uninterruptible power supply (UPS), especially in areas prone to power failure. Power failures and other events that abruptly terminate the function of the instrument and computer can corrupt data and possibly damage the system.</p> <p> <b>WARNING! PHYSICAL INJURY HAZARD.</b> Do not attempt to lift the UPS unit without assistance of at least two people. Improper lifting can cause painful and permanent back injury. Refer to the UPS manufacturer user guide for more information.</p> <p><b>IMPORTANT!</b> UPSs provide power for a limited time. They are meant to delay the effects of a power outage, not to serve as replacement power sources. In the event of a power loss, power off the instrument and computer unless you expect to regain power within the battery life of the UPS.</p>
Surge protector	<p>We recommend the use of a 10-kVA surge protector (line conditioner) in areas with frequent electrical storms or near devices that are electrically noisy, such as refrigerators, air conditioners, or centrifuges. Short-duration, high-voltage power fluctuations can abruptly terminate the function of, and thereby damage the components of, the computer and the instrument.</p> <p><b>Note:</b> A dedicated line and ground between the instrument, computer, and the building's main electrical service can also prevent problems caused by power fluctuations.</p>

## Network and password security requirements

### Network configuration and security

The network configuration and security settings of your laboratory or facility (such as firewalls, anti-virus software, network passwords) are the sole responsibility of your facility administrator, IT, and security personnel. This product does not provide any network or security configuration files, utilities, or instructions.

If external or network drives are connected to the software, it is the responsibility of your IT personnel to ensure that such drives are configured and secured correctly to prevent data corruption or loss. It is the responsibility of your facility administrator, IT, and security personnel to prevent the use of any unsecured ports (such as USB, Ethernet) and ensure that the system security is maintained.

### Password security

Thermo Fisher Scientific strongly recommends that you maintain unique passwords for all accounts in use on this product. All passwords should be reset upon first sign in to the product. Change passwords according to your organization's password policy.

It is the sole responsibility of your IT personnel to develop and enforce secure use of passwords.

## Safety



**WARNING! GENERAL SAFETY.** Using this product in a manner not specified in the user documentation may result in personal injury or damage to the instrument or device. Ensure that anyone using this product has received instructions in general safety practices for laboratories and the safety information provided in this document.

- Before using an instrument or device, read and understand the safety information provided in the user documentation provided by the manufacturer of the instrument or device.
- Before handling chemicals, read and understand all applicable Safety Data Sheets (SDSs) and use appropriate personal protective equipment (gloves, gowns, eye protection, and so on). To obtain SDSs, visit [thermofisher.com/support](https://www.thermofisher.com/support).

### Symbols on this instrument




Symbols may be found on the instrument to warn against potential hazards or convey important safety information. In this document, the hazard symbol is used along with one of the following user attention words.

- **CAUTION!**—Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
- **WARNING!**—Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.
- **DANGER!**—Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



### Standard safety symbols

Symbol and description	
	<b>CAUTION!</b> Risk of danger. Consult the manual for further safety information.
	<b>CAUTION!</b> Caution, air inlet.
	<b>CAUTION!</b> Hot surface.
	<b>CAUTION!</b> Potential biohazard.

## Control and connection symbols

Symbols and descriptions	
	On (Power)
	Off (Power)
	Protective conductor terminal (main ground)

## Conformity symbols

Conformity mark	Description
	Indicates conformity with the WEEE Directive 2012/19/EU.   <b>CAUTION!</b> To minimize negative environmental impact from disposal of electronic waste, do not dispose of electronic waste in unsorted municipal waste. Follow local municipal waste ordinances for proper disposal provision and contact customer service for information about responsible disposal options.

## Safety information for instruments not manufactured by Thermo Fisher Scientific

Some of the accessories provided as part of the instrument system are not designed or built by Thermo Fisher Scientific. Consult the manufacturer's documentation for the information needed for the safe use of these products.

### Instrument safety

#### General



**CAUTION!** Do not remove instrument protective covers. If you remove the protective instrument panels or disable interlock devices, you may be exposed to serious hazards including, but not limited to, severe electrical shock, laser exposure, crushing, or chemical exposure.

#### Hot Surface



**CAUTION!** Hot surface. During instrument operation, the temperature of the plate nest can be as high as 100° C. The instrument has a software interlock to prevent the door from opening if the plate nest temperature is over 45° C, but if the system appears to be malfunctioning use caution when operating near the plate nest.

## Air inlet



**CAUTION! Air inlet.** Air inlet is only suitable for atmospheric air and not pressurized gas. Do not connect flammable gas to the air inlet port. Do not restrict air inlet port.

## Physical injury



**CAUTION! Moving and Lifting Injury.** Improper lifting can cause painful and permanent back injury.

Things to consider before lifting or moving the instrument or accessories:

- Depending on the weight, moving or lifting may require two or more persons.
- If you decide to lift or move the instrument after it has been installed, do not attempt to do so without the assistance of others, the use of appropriate moving equipment, and proper lifting techniques.
- Ensure you have a secure, comfortable grip on the instrument or accessory.
- Make sure that the path from where the object is to where it is being moved is clear of obstructions.
- Do not lift an object and twist your torso at the same time. Keep your spine in a good neutral position while lifting with your legs.
- Participants should coordinate lift and move intentions with each other before lifting and carrying.
- For smaller packages, rather than lifting the object from the packing box, carefully tilt the box on its side and hold it stationary while someone else slides the contents out of the box.

## Electrical safety



**WARNING! Ensure appropriate electrical supply.** For safe operation of the instrument:

- Plug the system into a properly grounded receptacle with adequate current capacity.
- Ensure the electrical supply is of suitable voltage.
- Never operate the instrument with the ground disconnected. Grounding continuity is required for safe operation of the instrument.



**WARNING! Power Supply Line Cords.** Use properly configured and approved line cords for the power supply in your facility.



**WARNING! Disconnecting Power.** To fully disconnect power either detach or unplug the power cord, positioning the instrument such that the power cord is accessible.

## Instrument component and accessory disposal



**CAUTION!** To minimize negative environmental impact from disposal of electronic waste, do not dispose of electronic waste in unsorted municipal waste. Follow local municipal waste ordinances for proper disposal provision and contact customer service for information about responsible disposal options.

## Safety and electromagnetic compatibility (EMC) standards

The instrument design and manufacture complies with the following standards and requirements for safety and electromagnetic compatibility.

### Safety standards

Reference	Description
EU Directive 2011/65/EU & Commission Delegated Directive (EU) 2015/863	European Union “RoHS Directive” – Restriction of hazardous substances in electrical and electronic equipment
IEC 61010-1	<i>Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements</i>
IEC 61010-2-010	<i>Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-010: Particular requirements for laboratory equipment for the heating of materials</i>
IEC 61010-2-081	<i>Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes</i>

## EMC standards

Reference	Description
EMC EN 61326-1	<i>Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements – Part 1: General Requirements</i>
FCC Class A equipment Caution	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:</p> <ol style="list-style-type: none"> <li>1. This device may not cause harmful interference, and</li> <li>2. This device must accept any interference received, including interference that may cause undesired operation.</li> </ol>
FCC Part 15 Subpart B (47 CFR)	<p><i>U.S. Standard Radio Frequency Devices</i></p> <p>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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.</p>

## Chemical safety



**WARNING! GENERAL CHEMICAL HANDLING.** To minimize hazards, ensure laboratory personnel read and practice the general safety guidelines for chemical usage, storage, and waste provided below. Consult the relevant SDS for specific precautions and instructions:

- Read and understand the Safety Data Sheets (SDSs) provided by the chemical manufacturer before you store, handle, or work with any chemicals or hazardous materials. To obtain SDSs, see the "Documentation and Support" section in this document.
- Minimize contact with chemicals. Wear appropriate personal protective equipment when handling chemicals (for example, safety glasses, gloves, or protective clothing).
- Minimize the inhalation of chemicals. Do not leave chemical containers open. Use only with sufficient ventilation (for example, fume hood).
- Check regularly for chemical leaks or spills. If a leak or spill occurs, follow the manufacturer cleanup procedures as recommended in the SDS.
- Handle chemical wastes in a fume hood.
- Ensure use of primary and secondary waste containers. (A primary waste container holds the immediate waste. A secondary container contains spills or leaks from the primary container. Both containers must be compatible with the waste material and meet federal, state, and local requirements for container storage.)
- After emptying a waste container, seal it with the cap provided.
- Characterize (by analysis if needed) the waste generated by the particular applications, reagents, and substrates used in your laboratory.
- Ensure that the waste is stored, transferred, transported, and disposed of according to all local, state/provincial, and/or national regulations.
- **IMPORTANT!** Radioactive or biohazardous materials may require special handling, and disposal limitations may apply.

## Biological hazard safety



**WARNING! Potential Biohazard.** Depending on the samples used on this instrument, the surface may be considered a biohazard. Use appropriate decontamination methods when working with biohazards.



**WARNING! BIOHAZARD.** Biological samples such as tissues, body fluids, infectious agents, and blood of humans and other animals have the potential to transmit infectious diseases. Conduct all work in properly equipped facilities with the appropriate safety equipment (for example, physical containment devices). Safety equipment can also include items for personal protection, such as gloves, coats, gowns, shoe covers, boots, respirators, face shields, safety glasses, or goggles. Individuals should be trained according to applicable regulatory and company/ institution requirements before working with potentially biohazardous materials. Follow all applicable local, state/provincial, and/or national regulations. The following references provide general guidelines when handling biological samples in laboratory environment.

- U.S. Department of Health and Human Services, *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, 6th Edition, HHS Publication No. (CDC) 300859, Revised June 2020  
<https://www.cdc.gov/labs/pdf/CDC-BiosafetymicrobiologicalBiomedicalLaboratories-2020-P.pdf>
- Laboratory biosafety manual, fourth edition. Geneva: World Health Organization; 2020 (Laboratory biosafety manual, fourth edition and associated monographs)  
[www.who.int/publications/i/item/9789240011311](http://www.who.int/publications/i/item/9789240011311)



## Materials for installation and operation

### Instruments, kits, consumables, and accessories

The following table describes the products covered in this user guide.

Catalog numbers that appear as links open the web pages for those products.

Instrument system		
Item	Cat. No.	Amount
QuantStudio™ Absolute Q™ Digital PCR System: <ul style="list-style-type: none"> <li>QuantStudio™ Absolute Q™ Digital PCR Instrument</li> <li>Dell™ OptiPlex XE3 Tower computer with monitor, keyboard, and mouse</li> </ul>	<a href="#">A52864</a>	1 instrument, 1 desktop computer and monitor
QuantStudio™ Absolute Q™ MAP16 Plate Kit includes: <ul style="list-style-type: none"> <li>12 QuantStudio™ Absolute Q™ MAP16 Digital PCR plates</li> <li>60 QuantStudio™ Absolute Q™ MAP plate gasket strips</li> <li>3 mL QuantStudio™ Absolute Q™ Isolation Buffer</li> </ul>	<a href="#">A52865</a>	1
QuantStudio™ Absolute Q™ Digital PCR Starter Kit [1]	<a href="#">A52732</a>	1
Absolute Q™ DNA Digital PCR Master Mix (5X)	<a href="#">A52490</a>	200 reactions
QuantStudio™ Absolute Q™ Isolation Buffer	<a href="#">A52730</a>	(1) 3 mL bottle

[1] The kit is required for system installation. See *QuantStudio™ Absolute Q™ Digital PCR Starter Kit User Guide* (Pub No. MAN0025653).

### Required materials not supplied

Unless otherwise indicated, all materials are available through [thermofisher.com](http://thermofisher.com). "MLS" indicates that the material is available from [fisherscientific.com](http://fisherscientific.com) or another major laboratory supplier.

Item	Source
<b>Equipment</b>	
Centrifuge, table top	MLS
Pipettes, P10, P20 and P200	MLS
Pipette tips, P10, P20 and P200	MLS
<b>Other consumables</b>	
Microcentrifuge tubes	MLS
Microcentrifuge tube rack	MLS

(continued)

Item	Source
Nuclease-Free Water	MLS
Microfiber or optical lens cleaning cloth	MLS
70% ethanol in water	MLS

## Receive and inspect the shipment

1. Verify that the items shown on the shipping list are the items that were ordered at the time of purchase.
2. Carefully inspect the shipping containers. Report any damage to the shipping company and to your service representative. Record any damage or mishandling on the shipping documents.  

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**Note:** The shipping crate is equipped with a "Tip-N-Tell" label to detect tipping during shipment. Report the presence of blue beads in the arrow to your service representative.

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3. Immediately unpack the reagents or installation kit box (boxed separately from the instrument components). Store the reagents at the temperatures specified on the product packaging or labels.

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**IMPORTANT!** Other than reagents or plates that require storage at specific conditions, do not unpack shipping containers at this time. To protect yourself from liability for damage that occurred during shipping, inspect the shipping containers and report damage as described above.

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## Move the crated instrument to the installation site

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**Note:** These tasks are typically completed by the shipping company.

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1. Clear the installation site of all unnecessary materials.
2. If possible, move the crated instrument to the installation site if it was not set on the bench by the shipping company.



**CAUTION! PHYSICAL INJURY HAZARD.** Do not attempt to lift or move the instrument without the assistance of others, the use of appropriate moving equipment, and proper lifting techniques. Improper lifting can cause painful and permanent back injury. Depending on the weight, moving or lifting an instrument may require two or more people.

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### **IMPORTANT!**

- Do not tip the crated instrument on end. Tipping can damage the instrument hardware and electronics.
  - After installation, retain the crate and instrument packaging if you need to relocate the instrument.
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## Documentation and support

### Related documentation

Document	Pub. No.
<i>QuantStudio™ Absolute Q™ Digital PCR System Installation, Use, and Maintenance Guide</i>	MAN0025621
<i>QuantStudio™ Absolute Q™ Digital PCR Starter Kit User Guide</i>	MAN0025653

### Customer and technical support

Visit [thermofisher.com/support](https://www.thermofisher.com/support) for the latest service and support information.

- Worldwide contact telephone numbers
- Product support information
  - Product FAQs
  - Software, patches, and updates
  - Training for many applications and instruments
- Order and web support
- Product documentation
  - User guides, manuals, and protocols
  - Certificates of Analysis
  - Safety Data Sheets (SDSs; also known as MSDSs)

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**Note:** For SDSs for reagents and chemicals from other manufacturers, contact the manufacturer.

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### Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](https://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](https://www.thermofisher.com/support).



COMBINATI INC 2450 Embarcadero Way Palo Alto, CA 94303 USA

For descriptions of symbols on product labels or product documents, go to [thermofisher.com/symbols-definition](https://www.thermofisher.com/symbols-definition).

The information in this guide is subject to change without notice.

**DISCLAIMER:** TO THE EXTENT ALLOWED BY LAW, THERMO FISHER SCIENTIFIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

**Revision history:** Pub. No. MAN0026431

Revision	Date	Description
A.0	3 March 2022	New site preparation guide for the QuantStudio™ Absolute Q™ Digital PCR System.

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