SeqStudio[™] Flex Series Genetic Analyzer

Publication Number 100104691 Revision C

This guide contains the information needed to prepare your site for installation of the SeqStudio[™] Flex Series Instrument Software v1.1.0 or later (Cat. No. A50369 and A50370).

Site preparation workflow

IMPORTANT! Thermo Fisher Scientific does not install, service, or repair products in area 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	
7 30 min	Review this site preparation guide	Q
1 day	Complete the site preparation checklist (page 2) Complete, date, and initial all items in the checklist before the scheduled installation date.	
() 1 hr	 Receive and inspect the shipment (page 19) Verify items ordered were shipped Inspect the shipping containers and report any damage Unpack installation kit and store as directed 	
1 day	Move the packaged shipment to the installation site (page 19) Prepare installation site and move packaged instrument to the site.	



Installation time and training

After the shipment is unpacked, the installation takes approximately 2 business days.

During and/or after installation, the service representative calibrates the instrument, performs run verification, reviews data, and provides some basic operator training. For additional training and reference information, see the user documents that are provided with the product.

If you ordered the optional <IQ/OQ/IPV or IQ/OQ> service, the service representative also performs this service during installation.

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 service representative arrives, the scheduled installation may be postponed.

1	Date	Initials	Site preparation requirement	See page
			Customer responsibilities have been reviewed.	
			Personnel have been assigned tasks and responsibilities.	- 3
			The installation site is identified and meets the following requirements:	
			Space and clearance	8
			Environmental	8
			Electrical	9
			Computer	12
			Network	13
			Safety	
			If a computer will be connected to the instrument, antivirus software is available for installation.	
			The shipment was received and inspected as follows:	19
			The items shown on the shipping list are the items that were ordered at the time of purchase.	
			Damage to shipping containers was reported to the shipping company that delivered the shipment and to your service representative.	
			Damage or mishandling was recorded on the shipping documents.	

1	Date	Initials	Site preparation requirement	See page
			All reagents and plates are unpacked and stored as specified on package labels.	19
			The installation site is cleared and ready for the installation.	
			The packaged shipping containers are moved to the installation site.	19
			All materials for installation, qualification, and operation are available.	
			The SeqStudio [™] Flex Series Genetic Analyzer IT Checklist (Pub. No. MAN0025632) has been completed and returned according to the instructions in the checklist.	3

IT checklist

Before the installation can be scheduled, the Network or IT specialist must fill out and return the *SeqStudio™ Flex Series Genetic Analyzer IT Checklist* (Pub. No. MAN0025632). The checklist contains return instructions.

Customer responsibilities

Personnel	Responsibilities and tasks to perform before the installation date
Site preparation/	Reviews the site preparation guide for site requirements.
installation	Coordinates personnel and tasks.
coordinator	Selects the installation site.
	• Reviews checklists with applicable personnel to verify that the site is properly prepared.
	 Reviews checklists with the service representative to verify that the site is properly prepared.^[1]
	Receives and inspects the packaged shipment.
	 Unpacks and stores the reagents box (if provided) according to the specifications indicated in the product information sheets.
	Schedules the installation and informs personnel of the installation day.
	Ensures that the site is clear of unnecessary material on the installation day.
	 Is available to assist the service representative throughout installation.^[1]
Laboratory safety	Reviews the safety requirements later in this guide.
representative	Ensures that all customer-provided materials for installation are present at the site.
	 Ensures that primary users (responsible for training other users) are available for training during the installation.

Personnel	Responsibilities and tasks to perform before the installation date
Laboratory personnel/ primary users	 Reviews the safety requirements later in this guide. Ensures that all customer-provided materials for installation are present at the site. Ensures that primary users (responsible for training other users) are available for training during the installation.
Facilities personnel	 Ensures that the installation requirements are met for the installation site. Space at the installation site Building clearances Humidity and temperature Waste collection Electrical supply Computer (if included with product) Safety and installation materials Moves the packaged shipment to the site before the installation date. Is available to assist service representative and laboratory personnel. Ensures that at least three people are available to help the service representative lift and position the instrument. Alternatively, provides a hydraulic lifting table or equivalent for lifting the instrument. Retains and stores the empty shipping containers for future use.
Network or IT specialist (if the product will be connected to a network)	 Ensures that active, tested local area network (LAN) connections are in place. Ensures that network hardware is compatible with an RJ45-type connector. If necessary, supplies additional cables. Is available during installation to connect the product to the network. If applicable, provides and installs a network or dedicated printer. CAUTION! Do not connect the product components to the network before the service representative arrives.
Network or IT specialist	Completes and returns the <i>SeqStudio[™] Flex Series Genetic Analyzer IT Checklist</i> (Pub. No. MAN0025632). The checklist contains return instructions.

 $\ensuremath{^{[1]}}$ 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.

Components (packaged)

Ensure that the building clearances allow for transport of the packaged components.

Package	Height	Length (depth)	Width	Weight
Instrument	111 cm (44 inches)	79 cm (31.2 inches)	81 cm (32 inches)	139 kg (307 lbs)

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.

Components (unpackaged)

Height	Length (depth)	Width	Weight
87 cm (35 inches)	~68 cm (27 inches)	~70 cm (28 inches) with doors closed	~115 kg (254 lbs)
		~99 cm (39 inches) with doors open	A bench that is rated for ~150 kg (331 lbs) is recommended.

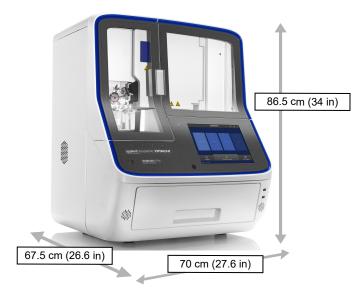
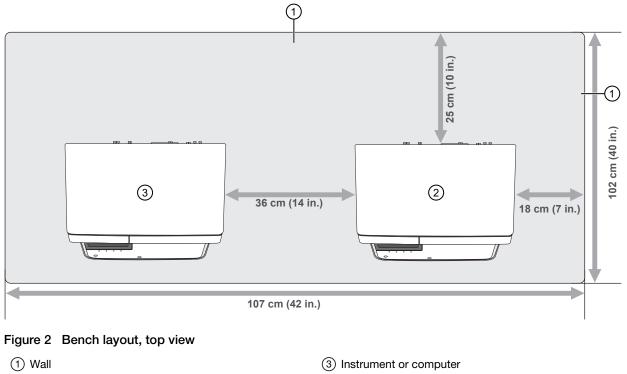


Figure 1 Instrument dimensions

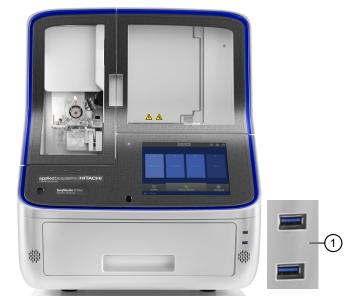
Approximately 60 cm (24 inches) of space is required above the instrument.





2 Instrument

Note: A computer is not required to operate the instrument. If the instrument will be configured for wired (LAN) or wireless connection, the computer can be installed in any location. If the instrument will be configured for direct connection, the computer must be installed next to the instrument.



Power and communication connections

Figure 3 Instrument front panel connections

(1) USB ports used for transferring data



Figure 4 Instrument rear panel connections

- (1) Recessed USB port (for use with the wireless network adapter; adapter not shown)
- (2) USB port (for optional USB barcode scanner connection)
- ③ Direct connection port ____ (to allow computer connection without a network)
- ④ Wired network port 器
- (5) Circuit breaker (rear power switch; use the power switch on the front panel for normal operation)
- 6 Power receptacle

SeqStudio™ Flex Series Instrument Software v1.1.0 or later Site Preparation Guide Site requirements

Component clearances required for installation and maintenance

During installation and maintenance, it is necessary to access the back and sides of the product. If the instrument is not installed on a mobile bench, ensure that there is sufficient clearance on the bench to rotate the product during installation, maintenance, or repairs.



CAUTION! For safety reasons, the power outlet into which the instrument is plugged and the power receptacle on the rear of the instrument must be accessible at all times.

Parameter	Recommended clearance	
Length (depth)	~25 cm (10 inches) at the rear of the instrument to ensure adequate airflow and cooling.	
Width	~18 cm (7 inches) from wall.	
	~36 cm (14 inches) from other instruments or computers.	
Height	~60 cm (24 inches) from the top of the instrument.	
	~150 cm (60 inches) from the bench top.	

Environmental requirements

Condition	Acceptable range	
Installation site	Indoor use only	
Electromagnetic Do not use this device in close proximity to sources of strong electromagnetic (for example, unshielded intentional RF sources). Strong electromagnetic rad interfere with the proper operation of the device.		
	This equipment has been designed and tested to CISPR 11 Class A. In a domestic environment it may cause radio interference. You may need to take measures to mitigate the interference.	
Altitude	Safety tested up to 2,000 m (6,500 ft.)	
Operating conditions	15–30°C (59–86°F), 20–80% relative humidity (noncondensing)	
	Room temperature should not fluctuate ±2°C during an instrument run.	
Transport and storage conditions	-30 to +60°C (-22 to +140°F), 5-95% relative humidity	
Transient category	Installation categories II	
Overvoltage category	Installation categories II	
Vibration	Ensure that the instrument is not adjacent to strong vibration sources, such as a centrifuge, pump, or compressor. Excessive vibration will affect instrument performance.	

Condition	Acceptable range
Pollution degree	П
	Install the instrument in an environment that is free of pollutants other than non- conductive pollutants such as dust particles or wood chips. Typical environments with a Pollution Degree II rating are laboratories and sales and commercial areas.
Liquid waste collection	Dispose of the polymer, buffer, reagents and any liquid waste as hazardous waste in compliance with local and national regulations.
Other conditions	Ensure that the room is away from any vents that could expel particulate material on the components.
	Avoid placing the instrument and computer adjacent to heaters, cooling ducts, or in direct sunlight.



WARNING! Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the instrument, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.



WARNING! Use of this equipment adjacent or stacked with other equipment should be avoided because it could result in improper operation.

WARNING! Use of accessories, transducers, and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Electrical requirements



CAUTION! Do not unpack or plug in any components until they are configured for the proper operating voltage by the service representative.

WARNING! For safety, the power outlet for the instrument must be accessible at all times. The instrument must be ~18 cm (7 inches) from a wall or ~36 cm (14 inches) from other instruments or computers.

In case of emergency, you must be able to immediately disconnect the main power supply to all the equipment. Allow adequate space between the wall and the equipment so that the power cords can be disconnected in case of emergency.

- Dedicated line and ground between the instrument and the main electrical service
- Maximum power dissipation: 1,000 VA, 1,000 W (not including computer or monitor)
- Mains AC line voltage tolerances must be up to ±10% of nominal voltage

Device	Rated voltage	Maximum power	Rated frequency	Rated power
Instrument	100–240 ±10% VAC ^[1]	10 A (1,000 VA)	50/60 Hz	4.2 A (418 VA)

^[1] If the supplied power fluctuates beyond the rated voltage, a power line regulator may be required. High or low voltages can adversely affect the electronic components of the instrument.

Electrical protective devices

We recommend several protective devices in environments with large voltage and power fluctuations.

Recommended devices		
Power line regulator		
1.5-kVA power line regulator		
• Use in areas where the supplied power fluctuates in excess of ±10% of the normal voltage.		
Power fluctuations can adversely affect the function of the instrument and computer.		
Note: 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.		
Surge protector		

- 10-kVA surge protector (line conditioner)
- Use 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.

Note: A dedicated line and ground between the instrument, computer, and the building's main electrical service can also prevent problems caused by power fluctuations.

Uninterruptible power supply (UPS)

- 1.5-kVA uninterruptible power supply (UPS)
- Use 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.

CAUTION! PHYSICAL INJURY HAZARD. Do not attempt to lift or move the UPS unit without the assistance of at least two people. Improper lifting can cause painful and permanent back injury. See the UPS manufacturer user guide for more information.

IMPORTANT! A UPS provides power for a limited time. It is meant to delay the effects of a power outage, not to serve as a replacement power source. 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.

Safety requirements

Safety practices

A safety representative from your facility must ensure that:

- Personnel establish and follow all applicable safety practices and policies to protect laboratory personnel from potential hazards.
- All applicable safety devices and equipment are available at all times.

Required safety equipment

Your laboratory has specific safety practices and policies designed to protect laboratory personnel from potential hazards that are present. Follow all applicable safety-related procedures at all times.

The following safety equipment and protection from hazards must be available at the installation site:

- Protection from any sources of hazardous chemicals, radiation (for example, lasers, radioisotopes, radioactive wastes, and contaminated equipment), and potentially infectious biological material that may be present in the area where the service representative will work.
- Appropriate fire extinguisher:
 - You are responsible for providing an appropriate fire extinguisher for use on or near the equipment.
 - The types and sizes of fire extinguishers shall be suitable for use on electrical and chemical fires as specified in current codes, regulations, and/or standards, and with approval of the Fire Marshall or other authority having jurisdiction.
 - The installation of appropriate fire extinguishers shall be in addition to other fire-protection systems and not as a substitute or alternative to them.
- Eyewash
- Safety shower
- Eye and hand protection
- Adequate ventilation, including vent line/fume hood, if applicable
- · Biohazard waste container, if applicable
- First-aid equipment
- Spill cleanup equipment
- Applicable Safety Data Sheets (SDSs)

Computer requirements

A computer is not required to operate the instrument. A computer is required the use of Thermo Fisher[™] Connect Platform applications, Plate Manager (desktop) software, and Plate Manager (cloud) software.

IMPORTANT! We strongly recommend that you use a computer obtained from Thermo Fisher Scientific. These computers are validated for use with Thermo Fisher Scientific software, which may have different operating system settings than a commercially available computer. Specific operating system settings are required for the proper operation of Thermo Fisher Scientific software.

IMPORTANT! Antivirus software must be installed on the computer. See "Antivirus software requirements" on page 13.

Application	Minimum requirements
Thermo Fisher™ Connect Platform applications	Any computer with internet connection
Plate Manager (desktop) software ^[1]	 Operating system options: Windows[™] 10 (64-bit) OS X[™] Mojave 10.14 Memory-4 GB RAM minimum Hard drive-1 GB minimum free space
Desktop secondary analysis applications ^[1]	See the product documents for each application.
Security, Auditing, and E-signature (SAE) v2.1	 Intel[™] Core[™] processor or compatible Operating system: Windows[™] 10 (64-bit) Memory: ≥16 GB RAM Hard drive: ≥500 GB free space One open Ethernet port for connecting directly to the instrument Browser options: Google Chrome[™] version 105 or later (recommended) Microsoft[™] Edge[™] version 105 or later Mozilla[™] Firefox[™] version 105 or later

^[1] Plate Manager software (desktop) and/or secondary analysis applications can alternatively be installed on the same computer as the Security, Auditing, and E-signature (SAE) software.

Antivirus software requirements

The optional computer that is available from Thermo Fisher Scientific does not include antivirus software because customer preferences and network requirements vary. You are responsible for installing antivirus software of your choice to protect the computer against viruses.

The following antivirus software applications have been tested for use with an optional computer:

- Symantec[™] Endpoint Protection
- Norton Internet Security™
- Microsoft[™] Defender antivirus software

Third-party software

Before installing third-party software on the computer running the product software, confirm that the third-party software will not have either/or of the following effects on the computer:

- Restrict Ethernet communication.
- Interfere with instrument or computer operation.

Network requirements

Internet connectivity

Connecting to the Internet allows you to access Thermo Fisher[™] Connect Platform data storage and software applications, remotely monitor instrument runs, update software, use the Smart Help function, and access remote system support.

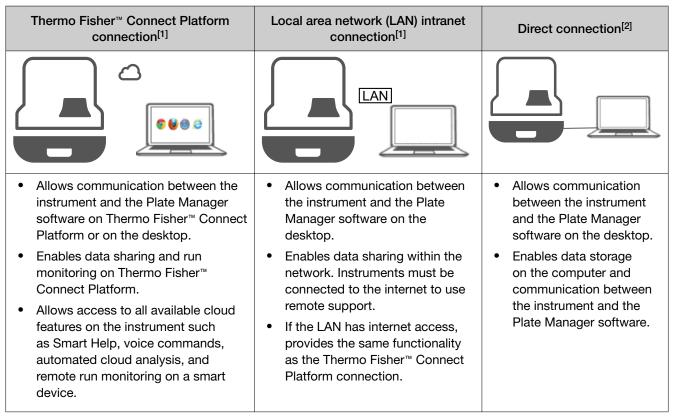
By allowing outbound access to the Internet from the instrument, you allow service personnel to provide inbound support. The instrument runs a remote monitor agent that can provide service personnel with critical system information, such as installed software versions and instrument alarms. With your permission, the agent also allows service personnel to access the instrument remotely, which is required for system support. Without remote access, service personnel cannot access, view, and troubleshoot problems regarding instrument performance.

For more information about the Thermo Fisher[™] Connect Platform, go to **thermofisher.com/** digitalsolutions.

If you have specific questions about Internet connectivity, operating system patches, antivirus software, or networking, contact connectivitysupport@thermofisher.com.

Network options and features

IMPORTANT! If the Security, Auditing, and E-signature (SAE) function is enabled on an instrument with SeqStudio[™] Flex Series Instrument Software v1.1.0 or later, Thermo Fisher[™] Connect Platform features are available. The Security, Auditing, and E-signature (SAE) software is purchased separately.



^[1] This configuration can be set with the wired connection or wireless connection setting in the software.

^[2] This configuration must be set with the direct connection setting in the software.

Features	Thermo Fisher™ Connect Platform enabled + WLAN/LAN connection ^[1]	Internet + WLAN/LAN connection	WLAN/LAN connection	Direct connection
Plate Manager software	Desktop or cloud	Desktop	Desktop	Desktop
Remote run monitoring on a smart device ^[2]	Supported	Not supported	Not supported	Not supported
Remote support	Supported	Supported	Not supported	Not supported
Smart Help ^[2]	Supported	Not supported	Not supported	Not supported
Voice commands ^[2]	Supported	Not supported	Not supported	Not supported

Features	Thermo Fisher™ Connect Platform enabled + WLAN/LAN connection ^[1]	Internet + WLAN/LAN connection	WLAN/LAN connection	Direct connection
Automated cloud analysis ^[2]	Supported	Not supported	Not supported	Not supported
Security, Auditing, and E-signature (SAE)	Supported ^[3]	Supported	Supported	Supported

^[1] Wireless area network/local area network

^[2] Requires internet connection and Thermo Fisher[™] Connect Platform access.

^[3] Supported in Instrument Software v1.1.0 and later.

Network and firewall requirements

All options require specific firewall exceptions to support features of the software.

Network connection	Requirement
Wireless	A wireless adapter (also referred to as a <i>dongle</i>) is provided with the instrument. The wireless connection conforms to 802.11 b/g/n wireless standards.
	Ensure that the location of the instrument allows Wi-Fi connectivity.
Wired	The instrument is factory-configured for IPv4 TCP/IP communication and uses an Ethernet adapter (100/1,000 Mbps) with an RJ45-type connector for local area network (LAN) connection.
	An active, tested network jack must be in place before the scheduled installation date.
	 The assigned IT or network specialist from your organization must be available during the installation to help connect the instrument to your network.
Direct	No network is required.

Networking requirements						
	Firewall exception requirements					
The system should be configured behind a firewall. If outbound traffic is limited, these firewall exceptions are required to support system features:						
URL	URL Port Purpose Required for functions					
*.logmein.com	outbound 443	To support remote access and support.	 Thermo Fisher[™] Connect Platform <i>or</i> LAN connection with internet access 			

	Netwo	rking requirements	
*.logmeinrescue.com	outbound 443	To support remote access and support.	 Thermo Fisher™ Connect Platform or LAN connection with internet access
*.instrumentconnect.com	outbound 443	To support instrument management and identity.	 Thermo Fisher[™] Connect Platform only
*.thermofisher.com	outbound 443	To support instrument management and identity.	 Thermo Fisher[™] Connect Platform or LAN connection with internet access
*.s3.us-east-1.amazonaws.com	outbound 443	To support telemetry and log files.	 Thermo Fisher[™] Connect Platform <i>or</i> LAN connection with internet access
*.iot.us-east-1.amazonaws.com	outbound 443	To support telemetry and log files.	 Thermo Fisher™ Connect Platform or LAN connection with internet access
Allowed port requirements			
_	TCP 445 (SMB v3 or higher)	To support file sharing.	 LAN connection or Direct connection
_	8443	To support communication between the instrument and the SAE server v2.1.	Any connection with Security, Auditing, and E-signature (SAE)

Network and password security requirements

Network configuration and security

The network configuration and security settings of your laboratory or facility (such as firewalls, antivirus 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.

Materials for installation and operation

Installation materials

Ensure that the following materials are available before installation of the product.

General materials

- Moving equipment that can accommodate the weights and dimensions of the shipping container (see "Components (packaged)" on page 5)
- Safety glasses, lab coats, and chemical-resistant, disposable gloves (powder-free)
- Mobile bench to allow access to the instrument for maintenance and service
- Mini vortexer, centrifuge, and sample tubes
- Easily accessible specified power outlet
- *(Optional)* Electrical protective devices (universal power supply unit, surge protector, and/or power line regulator)
- (Optional) External network connection
- Freezer (–20°C)
- Refrigerator or cold-room (4°C)
- Lint-free tissues
- Glassware washing solution
- Methanol or isopropanol, HPLC-grade or better
- Water
- Three sizes of micropipettors and tips:
 - 1- to 10-µL
 - 10- to 100-µL
 - 100- to 1,000-µL

Fragment analysis materials

The additional materials that are required to perform a fragment analysis install run are listed below.

- MicroAmp[™] Clear Adhesive Film (Cat. No. 4306311) to cover plates before PCR)
- Thermal cycler or heat block
- Tabletop centrifuge with 96-well plate adapters

Operation materials

Additional supplies and consumables are necessary for routine operation. Contact a sales representative to order these additional supplies. Use only supplies as specified by Thermo Fisher Scientific.

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. Take photographs of any damage, then report the damage to the shipping company and to your service representative. Record any damage or mishandling on the shipping documents.
- **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. Storage temperatures are also listed in "Installation kit contents" on page 21.

IMPORTANT! Other than reagents or plates that require storage at specific conditions, do not unpack the instrument 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.

Move the packaged shipment to the installation site

- 1. Clear the installation site of all unnecessary materials.
- 2. Move the packaged shipment to the installation site.



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.



CAUTION! Do not tip the package on end. Tipping may damage the hardware and electronics.

Note: After installation, keep the packaging in case you need to relocate the components.

Retain and store the shipping carton and accessories

After the instrument is installed, retain the shipping carton, shipping brackets, and shipping foam protectors. Store the items for future use, if needed. Alternatively, you can purchase the shipping carton and accessories if the instrument requires shipping.

For shipping carton dimensions, see "Components (packaged)" on page 5.

Note: The shipping carton sides can be removed from the bottom and collapsed to require less storage space.

Register to access the Thermo Fisher[™] Connect Platform

The Thermo Fisher[™] Connect Platform allows access to software applications and secure data storage.

Go to apps.thermofisher.com, then follow the on-screen instructions to create a new account.

Installation kit contents

Sequencing and fragment analysis installation kits

The following table provides information about the products available in the SeqStudio[™] 8 Flex Genetic Analyzer Sequencing and Fragment Analysis Installation Kit (Cat. No. A53802) and the SeqStudio[™] 24 Flex Genetic Analyzer Sequencing and Fragment Analysis Installation Kit (Cat. No. A53828)

Cat. No.	Name	Qty	Storage Temperature	8 Flex kit (Cat. No. A53802)	24 Flex kit (Cat. No. A53828)
4393708	POP-7 [™] (384) Performance Optimized Polymer	2	2–8°C	1	1
4404312	Sequencing Standards, BigDye™ Terminator v3.1	1	2–8°C	1	1
4337035	BigDye™ Terminator v3.1 Cycle Sequencing Kit User Guide	1	_[1]	1	1
	This is used by Field Application Specialists for customer training.				
4345833	DS-33 Matrix Standard Kit (Dye Set G5) This is a sample kit used by Field Application Specialists for customer training.	1	2–8°C	J	1
4376911	DS-33 GeneScan [™] Installation Standards with GeneScan [™] 600 LIZ [™] Size Standard v2.0	1	–25°C to –15°C	1	1
	Use 4345833 only to qualify instruments with GeneMapper™ Software.				
A49106	Capillary array 50-cm SeqStudio™ 8 Flex	1	2–8°C	1	_
A49107	Capillary array 50-cm SeqStudio™ 24 Flex	1	2–8°C	_	1
4401457	Hi-Di™ Formamide, 5 mL	2	–25°C to –15°C	1	1
4393927	Anode Buffer Container 3500/Flex Series (4 pack)	1	2–8°C	1	1
4408256	Cathode Buffer Container 3500/Flex Series (4 pack)	1	2–8°C	1	1
4410715	Septa Cathode Buffer Container 3500/Flex Series (10 each)	1	_	1	1
4393718	Conditioning Reagent Kit 3500/Flex Series	3	2–8°C	1	1
4306737	MicroAmp [™] Optical 96-Well Reaction Plate with Barcode (20 plates)	1	_	1	1

Cat. No.	Name	Qty	Storage Temperature	8 Flex kit (Cat. No. A53802)	24 Flex kit (Cat. No. A53828)
4412614	96-Well Septa 3500/Flex Series (20 each)	1	_	1	1
A49316	96-Well Standard Retainer & Base Set SeqStudio™ Flex Series (4 pack)	1	_	1	<i>✓</i>
AM9930	Nuclease-Free Water (not DEPC-Treated) 500 mL	1	_	1	1
4412619	Polymer Pouch Cap (4 pieces)	1	_	1	1

 $\ensuremath{^{[1]}}$ Store kit contents according to the instructions in the user guide.



Life Technologies Holdings Pte Ltd | Block 33 | Marsiling Industrial Estate Road 3 | #07-06, Singapore 739256 For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

Revision history: 100104691 C (English)

Revision	Date	Description
С	17 January 2024	Updated information that Thermo Fisher™ Connect Platform features can be accessed whether SAE is disabled or enabled in the SeqStudio™ Flex Series Instrument Software v1.1.0 or later.
В	21 December 2022	 Clarify the storage temperature for the contents of the BigDye™ Terminator v3.1 Cycle Sequencing Kit. Correct the storage temperature for the DS-33 GeneScan™ Installation Standards with GeneScan™ 600 LIZ™ Size Standard v2.0.
A	25 January 2022	New document for SeqStudio™ Flex Series Genetic Analyzer with Instrument Software v1.0.

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.

Important Licensing Information: This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

TRADEMARKS: All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

©2022-2024 Thermo Fisher Scientific Inc. All rights reserved.

thermofisher.com/support | thermofisher.com/askaquestion

thermofisher.com

