10x GENOMICS

Specifications | CG000630 | Rev H

Xenium Analyzer

For use with:

Xenium Analyzer with 12-Month Warranty, PN-1000481
(Includes Xenium Instrument Bundle, PN-1000569 - Xenium Analyzer, Analysis Computer, Instrument Accessory Kits)



Notices

Document Number

CG000630 | Rev H

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Document Revision Summary

Document Number

CG000630 | Rev H

Title

Xenium Analyzer Specifications

Revision

Rev G to Rev H

Revision Date

November 2026

Specific Changes

- Updated Vibration Isolation Table Gauge Specification (pg 7)

General Changes

Introduction

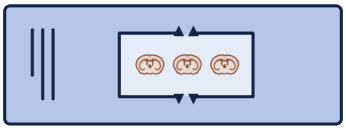
Xenium In Situ is the next-level in situ solution for subcellular profiling of hundreds of RNA targets. Xenium Analyzer combined with our curated & customizable panels, powerful visualization software, and easy-to-follow workflow is a powerful in situ profiling platform, revealing new insights into cellular structure and function. The key attributes of Xenium Analyzer are highlighted below.

Flexible platform with high throughput & speed

Xenium Analyzer is a flexible platform, compatible with both fresh frozen (FF) and formalin fixed & paraffin embedded (FFPE) tissues. It also offers the flexibility to use either a pre-designed gene panel or customize a gene panel for in situ gene profiling.

A Xenium slide with a large imageable area (12 x 24 mm) allows larger tissues or multiple tissues to be included in a single run, increasing efficiency and speed. Each Xenium Analyzer run can process up to two slides in as little as two days, with up to three runs in a week. Additionally, sample processing along with simultaneous on-instrument real-time analysis minimizes the sample to data time.

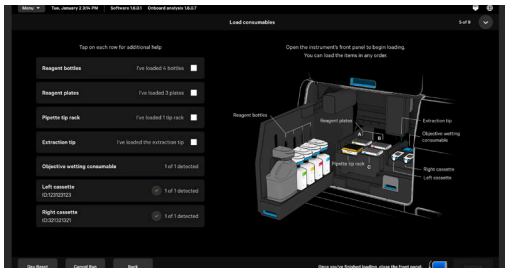
Xenium Slide - Large Imageable Area (12 x 24 mm)



Highly intuitive, user friendly workflow

The intuitive instrument design and easy to follow user interface allows the user to get started quickly and execute the seamless automated workflow with minimal hands-on time. The automated on-instrument workflow performs successive rounds of fluorescent probe hybridization, imaging, and probe removal to generate optical signature for each transcript.

Xenium Analyzer - Intuitive User Interface



Introduction
contd.

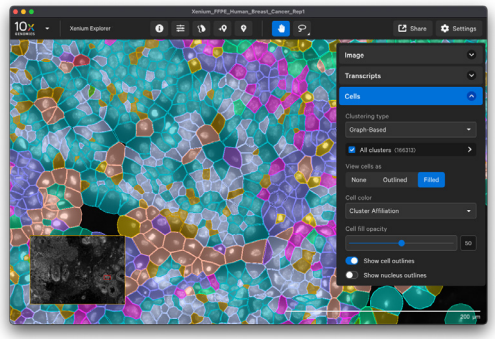
A unique and powerful feature of the Xenium workflow is that at the end of a run, the tissue morphology on the Xenium slide remains intact. This enables the user to perform further analysis, for example, H&E staining, immunostaining, etc., maximizing the insights gained from the sample*

Robust data generation & visualization

The Xenium Analyzer generates robust in situ data at subcellular resolution and single molecule detection with sub-50 nm XY localization precision. The on-instrument analysis includes image processing, decoding, and secondary analysis. The data shows cell-feature matrix, full transcript localization, segmentation boundaries, initial clustering results, and morphology images, and is ready for off-instrument exploration.

Data generated on the instrument can be transferred off the instrument and visualized with the free Xenium Explorer desktop software. Xenium Explorer allows immediate interactivity with the on-instrument output, including overlays of transcripts at subcellular resolution, morphology images, segmentation results, and cluster localization.

Xenium Explorer - Interactive Data Visualization



Comprehensive & sustained support

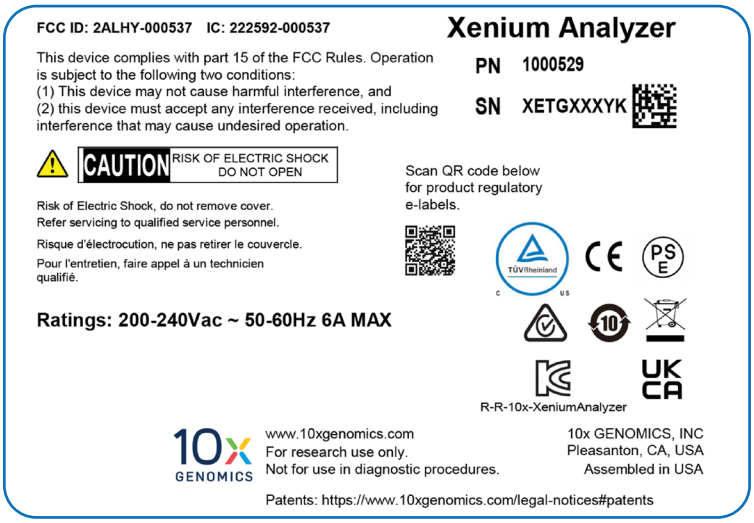
The 10x Support team will provide comprehensive customer support, starting with site preparation, installation and training, followed by sustained support on all aspects of the Xenium workflow. In addition, an extensive portfolio of documents and videos on the 10x Genomics website will enable and educate users to successfully execute the workflow.

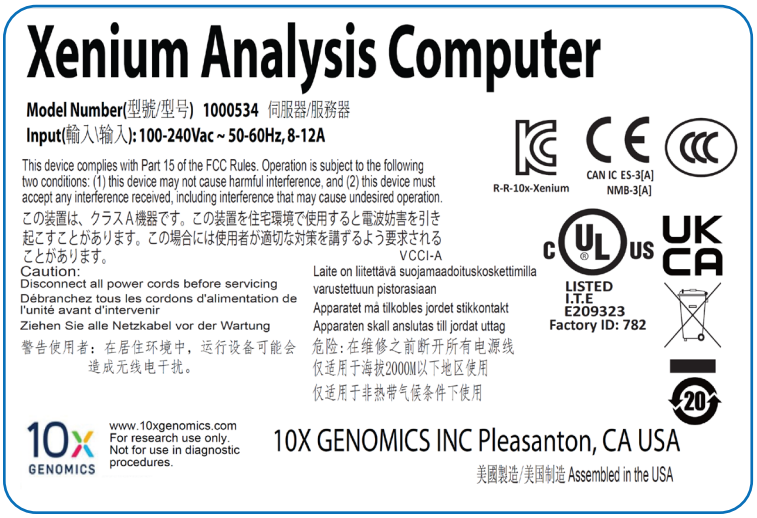
To further enhance the impact of the Xenium In Situ platform, 10x Genomics will continue adding more innovative features and analysis capabilities to the platform.

*Janesick A et al. High resolution mapping of the breast cancer tumor microenvironment using integrated single cell, spatial and in situ analysis of FFPE tissue. Nat Commun. 2023 describes an integrated approach on a limited set of samples to gain deeper insights (not formally supported).

Product Identification Labels

The product label is located at the back panel of the instrument. Images of the labels below are for reference only.





Instrument Specifications

Parameter	Xenium Analyzer Specifications		
Weight			
Xenium Analyzer	~550 lb/249.5 kg		*Total weight of system: ~1,182 lb (536.1 kg)*
Xenium Analysis Computer	~57 lb/25.8 kg		
Vibration Isolation Table	~575 lb/260.8 kg		
Dimensions	**W**	**D**	**H**
Xenium Analyzer	52.5"/133.3 cm	27"/68.5 cm	31"/78.7 cm *59"/149.8 cm - door open*
Xenium Analysis Computer	7"/17.8 cm	26.5"/67.3 cm	18"/45.7 cm
Vibration Isolation Table	53.2"/135.0 cm	29.9"/76.0 cm	31.1"/79.0 cm
UPS *(APC SRT3000XLT or similar; not provided by 10x Genomics)*	3.4"/8.5 cm	25"/63.5 cm	17"/43.2 cm
Xenium Analyzer Electrical Specifications	800W, 200–240 VAC, 50–60Hz, 4.0A–3.3A*		
Pollution Degree	2 (Indoor Use Only)		
Operating Temperature	19–25°C (66–77°F) *Use in a typical indoor laboratory environment. Extreme temperature conditions will affect the sensitive reagents used with the instrument.*		
Humidity	30–80% Relative Humidity, noncondensing		
Altitude	Altitude up to 2,000 m (1.2 miles) above sea level		
Environmental Vibration Guidelines	ISO Office (or better) during idle ISO Operating Theater (or better) during run *No bumps or shocks adjacent to or on the Vibration Isolation Table during a run*		
Heat Output	~2,000 W (6,820 BTU/h) *Combined output from the Xenium Analyzer & the Xenium Analysis Computer*		
Power Cable Length	~1.83–3 m (~6–9.8 ft) *Cables will be in accordance with regional specifications*		
Xenium Analysis Computer Specifications	RAM: 1TB DDR4–3200 ECC RDIMM Storage Capacity: 8 TB NVMe Ethernet Link Speed: 10Gbps Operating System: Ubuntu 22.04 LTS (nonconfigurable		
Xenium Analysis Computer Electrical Specifications	1200W, 200–240 VAC, 50–60Hz, 6.0A–5.0A*		
Vibration Isolation Table Gauge Specifications**	Source air supply (compressor, wall air, tank, etc.): ~100–150 psi Table air supply: ~90–100 psi Table leg pressure: ~70–80 psi		

**Electrical requirements dependent on region/country*

***Contact support@10xgenomics.com if table specifications are out of range.*

Xenium Analyzer
Safety

Before operation, ensure that all potential users have received:

- Instruction in general safety practices for laboratories.
- Instruction in specific safety practices for the instrument.
- All related Safety Data Sheet (SDS) documents.

Precautions are illustrated in the following way:

Symbols	Description
	The general Warning symbol indicates the possibility of damaging the instrument or compromising the results of a method.
	The Electrical Hazard symbol indicates the presence of electrical components that can be harmful to the operator if handled incorrectly.
	The Mechanical Hazard symbol indicates the presence of moving mechanical parts that can be harmful to the operator if handled incorrectly.
	The Hazardous Materials symbol indicates the presence of materials that are toxic or otherwise harmful to the operator if handled incorrectly.
	The Biohazard symbol indicates the presence of biological samples that can be harmful to the operator if handled incorrectly.
	The Caution, Hot Surface symbol indicates the possibility of touchable surface that may exceed 105°C.



Ensure ground is reliably connected before plugging the instrument's power cord into the power source (receptacle). *Grounding is required to prevent electric shock. If the power source is not grounded, qualified personnel must first install a reliable safety ground.*



Warning: The door is capable of moving an object that is in its opening path. If an object is in the path, the object could fall and create a hazard.



Pinch risk: Ensure no obstructions or fingers present near closing trays. Once the system is floating, keep fingers away from the area between the support plate and the top of the isolators. Any object between these points may be caught if the load or air supply changes.



Warning: Avoid using the Xenium Analyzer in a manner not specified by 10x Genomics. *The Xenium Analyzer has been designed to protect the user. If used improperly, the intended user protections can be impaired.*



Heavy Load: 1,182 lb (536.1 kg). Contact 10x Genomics Service Personnel for Lifting and Installation.

Xenium Analyzer
Regulatory

The Xenium Analyzer has been designed, tested, and certified to be in compliance with the following standards:

Certification	Standards
	TUV Certification only for Xenium Analyzer UL 61010-1:2012 and CAN/CSA C22.2 No. 61010-1-12 with a cTUVus mark to indicate that the product has been tested and certified to Canadian and US standards by TUV Rheinland and can be legally installed in those countries.
	IEC/EN 61010-1:2010 (3rd Edition): Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory use.
	EN 61326-1:2013: Electrical Equipment for Measurement, Control and Laboratory Use. EMC Requirements.
	The RCM mark indicates an electrical product complies with all the requirements of the electrical and EMC regulations of Australia and New Zealand in accordance with AS/NZS Standards.
	CE Mark indicates that assembly is covered by a Declaration of Conformity, and has been declared in conformity with the provisions of all applicable directives in the European Union.
	UKCA Mark indicates that assembly is covered by a Declaration of Conformity, and has been declared in conformity with the provisions of all applicable directives in the United Kingdom.
	EN 61326-2-6: Specifies minimum requirements for immunity and emissions regarding electromagnetic compatibility for in vitro diagnostic medical equipment, taking into account the particularities and specific aspects of this electrical equipment and their electromagnetic environment.
	EN 61000-3-2: Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase).
	EN 61000-3-3: Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection.
	RoHS Directive (2011/65/EU) and amendment (EU) 2015/863: Restriction of the use of certain hazardous substances in electrical and electronic equipment.
	WEEE Directive (2012/19/EU): Waste Electrical and Electronic Equipment.
	FCC Part 15 Class A. NOTE: 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. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
	ICES-003 (Canada): This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
	Complies to Japan's Ministry of Economy, Trade and Industry (METI) Electrical Appliance and Material Safety Law (DENAN). This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions. これは電波障害自主規制協議会 (VCCI) の基準に基づくクラス A 製品です。 この装置を家庭環境で使用すると、無線干渉が発生する可能性があり、その場合、ユーザーは是正措置を講じる必要があります。 VCCI-A

Xenium Analysis Computer

Safety

Before operation, ensure that all potential users have received:

- Instruction in general safety practices for laboratories.
- Instruction in specific safety practices for the instrument.



Warning: Read the installation instructions before connecting the system to the power source.



Warning: Only trained and qualified personnel should be allowed to install, replace, or service this equipment.



Warning: Installation of the equipment must comply with local and national electrical codes.



Warning: Keep fingers, screwdrivers, and other objects away from the openings in the fan assembly's housing



Warning: When installing the product, use the provided or designated connection cables, power cables and AC adaptors. Using any other cables and adaptors could cause a malfunction or a fire.

Xenium Analysis Computer
Regulatory

The Xenium Analysis Computer has been designed, tested, and certified to be in compliance with the following standards:

Certification	Standards
c UL us	UL Certification only for Xenium Analysis Computer UL 62368-1: 2019 and CAN/CSA-C22.2 NO. 62368-1:12 with a cULus mark to indicate that the product has been tested and certified to Canadian and US standards by UL and can be legally installed in those countries.
	IEC 62368-1: Audio/video, information and communication technology equipment - Part 1: Safety requirements.
	EN 55032:2015+A11:2020 (Class A) - Electromagnetic compatibility of multimedia equipment - Emission Requirements EN 55035:2017+A11:2020 - Electromagnetic compatibility of multimedia equipment - Immunity requirements
	The RCM mark indicates an electrical product complies with all the requirements of the electrical and EMC regulations of Australia and New Zealand in accordance with AS/NZS Standards.
CE	CE Mark indicates that assembly is covered by a Declaration of Conformity, and has been declared in conformity with the provisions of all applicable directives in the European Union.
UK CA	UKCA Mark indicates that assembly is covered by a Declaration of Conformity, and has been declared in conformity with the provisions of all applicable directives in the United Kingdom.
	EN 61000-3-2: Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase).
	EN 61000-3-3: Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection.
	RoHS Directive (2011/65/EU) and amendment (EU) 2015/863: Restriction of the use of certain hazardous substances in electrical and electronic equipment.
	WEEE Directive (2012/19/EU): Waste Electrical and Electronic Equipment.
	FCC Part 15 Class A. NOTE: 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. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
	ICES-003 (Canada): This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
CCC	China CCC: GB 17625.1-2012;GB 4943.1-2011;GB/T 9254.1-2021(Class A)
VCCI	Complies to Japan's Ministry of Economy, Trade and Industry (METI) Electrical Appliance and Material Safety Law (DENAN). This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions. これは電波障害自主規制協議会 (VCCI) の基準に基づくクラス A 製品です。 この装置を家庭環境で使用すると、無線干渉が発生する可能性があり、その場合、ユーザーは是正措置を講じる必要があります。 VCCI-A