10x GENOMICS

Specifications | CG000415 | Rev D

Chromium X Series (X/iX)

For use with:

Chromium X & Accessory Kit, 12-Month Warranty, PN-1000331

Chromium iX Accessory Kit, PN-1000323 | Chromium X Upgrade Kit, PN-1000327

Chromium X & Accessory Kit, 24-Month Warranty, PN-1000332
Chromium iX Accessory Kit, PN-1000323 | Chromium X Upgrade Kit, PN-1000327

Chromium iX & Accessory Kit, 12-Month Warranty, PN-1000328
Chromium iX Accessory Kit, PN-1000323

Chromium iX & Accessory Kit, 24-Month Warranty, PN-1000329
Chromium iX Accessory Kit, PN-1000323

Notices

Document Number

CG000415 | Rev D

Legal Notices

Instrument & Licensed Software Updates Warranties

Updates to existing Instruments and Licensed Software may be required to enable customers to use new or existing products. In the event of an Instrument failure resulting from an update, such failed Instrument will be replaced or repaired in accordance with the 10x Limited Warranty, Assurance Plan or service agreement, only if such Instrument is covered by any of the foregoing at the time of such failure. Instruments not covered under a current 10x Limited Warranty, Assurance Plan or service agreement will not be replaced or repaired.

Support

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Document Revision Summary

Document Number

CG000415 | Rev D

Title

Chromium X Series (X/iX) Specifications

Revision

Rev C to Rev D

Revision Date

November 2021

Specific Changes

Product Identification Label updated on page 4.
China regulatory CMIIT ID information updated on page 5.

General Changes

N/A

Product Identification Label

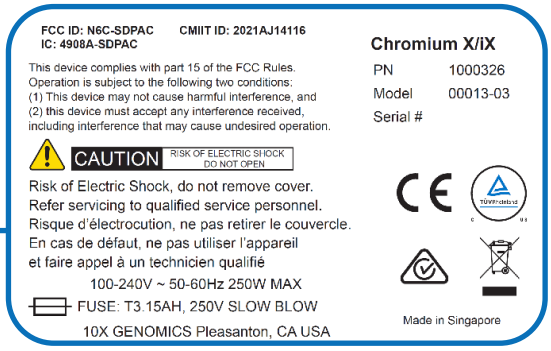
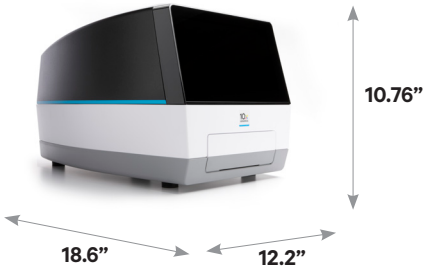


Image of label for reference only

Product Specifications

Parameter	Specifications
Weight	41.4 lb (18.8 kg)
Instrument Dimensions with: Tray close Tray open	W D H 12.2”[31.0 cm] × 18.6”[47.2 cm] × 10.76”[26.0 cm] 12.2”[31.0 cm] × 22.8”[58.0 cm] × 10.76”[26.0 cm]
Electrical Requirements Nominal *from a standard 3-prong wall receptacle that includes a safety ground pin*	 100-240 VAC, 50/60 Hz, 250 W 90-264 V operational range (+/- 10% of nominal) Overvoltage Category II (standard receptacle)
Pollution	Degree 2 (Indoor Use Only)
Ventilation Requirement	Minimum 4” [10 cm] Around all sides
Operating Temperature	64-82°F [18-28°C] Use in a typical indoor laboratory environment. Extreme temperature conditions will affect the sensitive reagents used with the instrument.
Humidity	30-80% R.H. non-condensing
Altitude	Altitude up to 7500 ft [2286 m] above sea level
Power Cable Length with regional adapters *Power kit will include power cable & detachable regional adapters*	6-7 ft [2 m] Standard



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.

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 tray door is capable of moving an object that is in its opening path. If near the edge of the workspace, the object could fall and create a hazard.

Pinch risk: Ensure no obstructions or fingers present near closing tray.

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

Heavy Load: 41.4 lb (18.8 kg). Two-person lift required.

Regulatory

The Chromium X/iX has been designed, tested, and certified to be in compliance with the following standards:

Certification	Standards
	TUV Certification only for Chromium X/iX 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.
	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): Restriction of the use of certain hazardous substances in electrical and electronic equipment.
	WEEE Directive (2012/19/EU): Waste Electrical and Electronic Equipment.
	FCC ID: N6C-SDPAC, IC: 4908A-SDPAC 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.
	In accordance with the provisions on the Radio Regulations of the People's Republic of China, this radio transmission equipment, after examination, conforms to the provision with its CMIIT ID.

System Maintenance

Interior

The instrument tray and door areas have been designed to catch and contain drips and a small volume of liquid spills. Occasionally, use a soft lab towel to clean these areas with a mixture of mild detergent and distilled water. For deeper, more thorough cleaning, it is acceptable to use a 5-10% Bleach solution followed by a 70% ethanol wash.

Do not use acetone or other harsh solvents, as these may remove the colored markings in the tray. Apply all standard safety practices when using cleaners, and dispose of any generated waste in a responsible manner.

Exterior

The exterior of the Chromium X/iX should always be kept clean and free of dust and debris that may affect its function and/or cooling efficiency. Generally, the exterior finish can be wiped down using a mixture of mild detergent and distilled water applied to a slightly dampened lab towel. As an added precaution it is recommended that the instrument be unplugged from the power source before beginning any cleaning process.

Service

Electrical shock hazard. Do not open the Chromium X/iX. There are no user-serviceable parts inside. Refer all servicing to qualified 10x Genomics service personnel.

Servicing is required when the Chromium X/iX has been damaged in any way (e.g., a power entry module or plug is damaged, liquid was spilled into, or objects fell into the instrument, the instrument does not operate properly, or has been dropped).

Use only the power cord supplied with the instrument. Do not replace it with a non-approved power cord as it may be inadequately rated to handle the electrical loads.

If replacing the externally accessible fuses in the power entry module becomes necessary, use only certified (EN60127 Sheet 5) 5 x 20 mm sized fuses rated T3.15AH, 250V Slow-Blow or equivalent.

When returning a Chromium X/iX, take steps to ensure that the instrument has been decontaminated so as not to pose a hazard for 10x Genomics service personnel.

Environmental Requirements

It is the design intent of the Chromium X/iX that it be used in a typical indoor laboratory environment. The instrument's operating temperature is 18-28°C (64-82°F), Humidity 85% Max (Non-Condensing) Altitude 0 - 7000 ft (0 - 2134 m); too low or too high temperature (see Product Specifications).