

Genexus Integrated Sequencer

The Ion Torrent™ Genexus™ Integrated Sequencer is part of the Ion Torrent™ Genexus™ System, the first turnkey next-generation sequencing (NGS) solution that automates the specimen-to-report workflow and delivers results in a single day.*

The Genexus Integrated Sequencer can also be used as a stand-alone instrument to automate NGS library prep, sequencing, and analysis, all on a single platform.



Key features of the Genexus Integrated Sequencer

Automation	Library prep, sequencing, and reporting all happen on one instrument with a set-up-and-go workflow
Streamlined on-instrument analysis	No server is required; integrated reporting capabilities are expected to be added in 2020
Easy operation	With prefilled reagents and preset instrument protocols, a single touchpoint and 5 min of total hands-on time gets the job done
Rapid turnaround	Go from nucleic acid to report in a single day
Flexibility to accommodate small sample batches	On-instrument reagent and chip stability supports sample intake variability
Onboard vision system	Ability to understand reagent placement and detect errors through automated barcode scanning
Robust, high-quality instrument	Manufactured at an FDA-registered and ISO 13485–certified facility
Innovative multilane chip	Simultaneously process up to 4 compatible assays in a single run

* Specimen-to-report workflow will be available after the Ion Torrent™ Genexus™ Purification System and integrated reporting capabilities are added in 2020.

Performance summary of Ion Torrent™ GX5™ Chip

	Application	1 lane	2 lanes	3 lanes	4 lanes
Output in reads		12–15M	24–30M	36–45M	48–60M
Number of samples	Custom Ion AmpliSeq 1-pool assay	4	–	–	32
	Oncomine Comprehensive Assay v3*	1	3	4	6
	Oncomine Precision Assay*	3	6	9	12
	Oncomine Precision Assay**	1	2	3	4
	Oncomine TCR Beta-LR Assay	4	8	12	16
Turnaround time (hr) (nucleic acid to Oncomine report)	Custom Ion AmpliSeq 1-pool assay	14	–	–	24
	Oncomine Comprehensive Assay v3*	18.5	20.5	27	29.5
	Oncomine Precision Assay*	16.5	21	26	28.5
	Oncomine Precision Assay**	16.5	17.5	20	22.5
	Oncomine TCR Beta-LR Assay	20	24	28.5	31

* For the formalin-fixed, paraffin-embedded (FFPE) DNA and RNA workflows.

** For the cell-free total nucleic acid (cfTNA) workflows.

Instrument specifications of Genexus Integrated Sequencer

Compatible chip	GX5 Chip
Dimensions (D x W x H)	32.1 x 41.9 x 66.1 in. (81.5 x 106.5 x 167.8 cm) All doors closed; floor-standing instrument
Weight	Total including crate: 895 lb (405.9 kg) Instrument only: 450 lb (204.1 kg)
Power	100–240 VAC, 50/60 Hz
Instrument clearance	Back: 6 in. (15.2 cm) Left/right: 10 in. (25.4 cm) on each side to allow lower doors to open all the way Top: 15.5 in. (39.4 cm) to allow upper door to open all the way
Working environment	Temperature: 15–30°C Humidity: 10–80% relative humidity (rH) Altitude: Up to 2,500 m above sea level
Other connections	Network
Warranty	12 months
Extended service warranty	AB Assurance Service Contract available
Software	Genexus Software

Ordering information

Product	Cat. No.
Genexus Integrated Sequencer	A45727
GX5 Chip and Genexus Coupler	A40269
Genexus GX5 Starter Pack-AS	A40279
Genexus GX Starter Pack-HD	A40280

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Find out more at thermofisher.com/genexus