

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

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|---|---|
| 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

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|---------------------------|---|
| 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: 12 in. (30.4 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

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