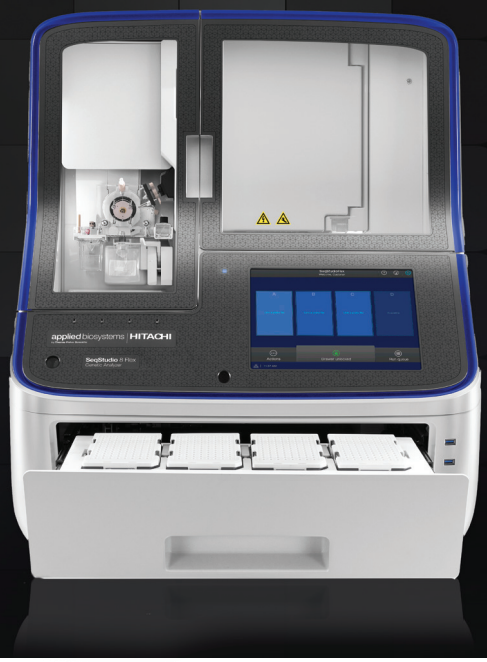
Specification sheet

Human identification

SeqStudio Flex Series Genetic Analyzers for human identification



Harness the freedom of the latest generation of Applied Biosystems™ SeqStudio™ Flex Series Genetic Analyzers that provide enhanced flexibility, ease of use, lab-friendly connectivity, and serviceability to help you solve cases faster.

Key features

- 8-capillary and 24-capillary systems with 4-plate capacity
- Flexible scheduling with continuous plate loading and sample reprioritization
- Spectral autocalibration
- Integrated touchscreen computer with data collection software
- Onboard learning center with self-help videos
- Web-enabled remote troubleshooting for rapid resolution of issues
- Advanced connectivity for simple data transfer
- Web-enabled remote monitoring, run setup, and instrument control*
- Traceability and data security with an optional security, audit, and e-signature (SAE) software module**
- Seamless data interpretation with Applied Biosystems™ GeneMapper™ *ID-X* Software v1.7

* Feature not available if optional SAE software module is enabled.
** SAE enablement requires on-site service by a field service engineer and a desktop PC or laptop computer purchased from Thermo Fisher Scientific.

Instrument specifications

Number of capillaries	8 or 24
Number of dyes	8-dye capable
Sample format	4-plate capacity; 96-well plates or 8-tube strips
Dimensions (W x D x H)	70 x 67.5 x 86.5 cm (27.6 x 26.6 x 34.1 in.)
Weight	115 kg (253.5 lb)
Power input	100–240 V
Internal hard drive	512 GB solid-state drive (SSD)
Excitation source	505 nm solid-state laser
Secondary analysis software*	• Applied Biosystems™ GeneMapper™ *ID-X* Software v1.7 • Applied Biosystems™ Sequence Analysis Software
On-instrument tracking	Radio frequency identification (RFID); internal barcode reader
Communication interface	Thermo Fisher™ Connect Platform with cloud-enabled capability; local area network (LAN); USB port for Wi-Fi dongle; 3 RJ-45 Ethernet ports; LIMS compatibility
Configuration	Stand-alone; optional desktop or laptop computer available
Warranty	Standard 1-year warranty included; extended warranties available
HID FAS training	Includes one day of on-site training by a field applications scientist
Remote troubleshooting	Smart Help and remote support enable fast and more effective resolution of instrument issues to minimize downtime

* Additional software analysis modules are available. Please consult with your Thermo Fisher HID team for more information.

Fragment analysis run module specifications

Run module type	Run module name	23 hr throughput**					Performance	
		Capillary length (cm)	Applied Biosystems™ polymer	Run time (min)	8-capillary configuration	24-capillary configuration	Sizing precision†	
							60–460 bp	461–580 bp
Human identification	HID_J6_36_POP4xl	36	POP-4™	≤37	≥298	≥895	<0.15	NA‡
	HID_J6_36_POP4	36	POP-4	≤37	≥298	≥895	<0.15	NA‡
	HID_G5_36_POP4xl	36	POP-4	≤32	≥345	≥1,035	<0.15	NA‡
	HID_G5_36_POP4	36	POP-4	≤32	≥345	≥1,035	<0.15	NA‡
	HID_J6T_36_POP4xl	36	POP-4	≤37	≥298	≥895	<0.15	NA‡
	HID_J6T_3 6_POP4	36	POP-4	≤37	≥298	≥895	<0.15	NA‡
	HID_J6_36_POP6xl	36	POP-6™	≤58	≥190	≥571	<0.15	<0.15
	HID_J6_36_POP6	36	POP-6	≤58	≥190	≥571	<0.15	<0.15

** Throughput (samples/day): The total number of samples run in 23 hr (0.5 hr is required for user interaction and 0.5 hr is required for warm-up time).

† Sizing precision: Standard deviation of sizes for one allele in the HID install standard or Applied Biosystems™ GlobalFiler™ Allelic Ladder, sized with the Applied Biosystems™ GeneScan™ 600 LIZ™ Size Standard v2.0 across multiple capillaries in the same run. For one injection to pass, 100% of the alleles in that injection must meet the intra-run sizing precision specifications. The table shows the sizing precision of 100% of alleles in ≥90% of samples.

‡ Not applicable due to the size of the fragments collected in the run.

Sanger sequencing run module specifications*

Run module type	Run module	Capillary length (cm)	Applied Biosystems™ polymer	23 hr throughput**			Performance
				Run time (min)	8-capillary configuration	24-capillary configuration	Contiguous read length†
Rapid sequencing	RapidSeq36_POP4 RapidSeq36_POP4xl	36	POP-4™	≤45	≥240	≥720	≥400
	RapidSeq36_POP6 RapidSeq36_POP6xl		POP-6™	≤70	≥168	≥504	≥600
	RapidSeq36_POP7 RapidSeq36_POP7xl		POP-7™	≤30	≥368	≥1,104	≥600
Rapid sequencing (with Applied Biosystems™ BigDye™ XTerminator™ Purification Kit)	BDxRapidSeq36_POP4 BDxRapidSeq36_POP4xl	36	POP-4	≤45	≥240	≥720	≥400
	BDxRapidSeq36_POP6 BDxRapidSeq36_POP6xl		POP-6	≤70	≥156	≥468	≥600
	BDxRapidSeq36_POP7 BDxRapidSeq36_POP7xl		POP-7	≤33	≥328	≥984	≥600
Fast sequencing	FastSeq36_POP7 FastSeq36_POP7xl	36	POP-7	≤60	≥184	≥552	≥750
Fast sequencing (with BigDye XTerminator Purification Kit)	BDxFastSeq36_POP7 BDxFastSeq36_POP7xl	36	POP-7	≤60	≥184	≥552	≥750

* Additional modules are also available.

** Throughput is an estimate extrapolated from the average run time.

† The maximum number of contiguous bases in the analyzed sequence with an average quality value (QV) of ≥20 calculated over a sliding window 20–base pairs wide from an Applied Biosystems™ long read standard sequencing sample. This calculation starts with base number 1. The read length is counted from the middle base of the first good window to the middle base of the last good window in which the average QV is ≥20.

Ordering information

Description	Cat. No.
SeqStudio 8 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, HPS Standard CW Validation, AB Assurance Plan with 1 included PM, FAS Training	A58063
SeqStudio 8 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, HPS Standard DB Validation, AB Assurance Plan with 1 included PM, FAS Training	A58064
SeqStudio 8 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, AB Assurance Plan with 1 included PM, FAS Training	A58065
SeqStudio 8 Flex Genetic Analyzer for Human Identification	A56532
SeqStudio 24 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, HPS Standard CW Validation, AB Assurance Plan with 1 included PM, FAS Training	A59250
SeqStudio 24 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, HPS Standard DB Validation, AB Assurance Plan with 1 included PM, FAS Training	A59255
SeqStudio 24 Flex Genetic Analyzer, GeneMapper *ID-X* Software v1.7 Full, AB Assurance Plan with 1 included PM, FAS Training	A59260
SeqStudio 24 Flex Genetic Analyzer for Human Identification	A56534
SAE Administrator Console Software v2.1 (optional)	A53717

Ordering information

Description	Quantity	Cat. No.
Capillary arrays		
SeqStudio Flex 24-Capillary Array (36 cm)	160 injections	A49105
SeqStudio Flex 8-Capillary Array (36 cm)	160 injections	A49104
SeqStudio Flex 24-Capillary Array (50 cm)	160 injections	A49107
SeqStudio Flex 8-Capillary Array (50 cm)	160 injections	A49106
96-well plates and accessories		
SeqStudio Flex 96-well Retainer & Base Set (standard)	4 sets	A49316
MicroAmp Optical 96-Well Reaction Plate with Barcode	20 plates*	4306737
Septa, for 96-well plates	20 units	4412614
8-tube strips and accessories		
SeqStudio Flex 8-Tube Strip Retainer & Base Set (standard)	4 sets	A49296
MicroAmp 8-Tube Strip, 0.2 mL	125 strips	N8010580
Septa, for 8-Tube Strip	24 units	4410701
System consumables		
POP-4 Polymer	384 samples	4393715
	960 samples	4393710
POP-6 Polymer	384 samples	4393717
	960 samples	4393712
POP-7 Polymer	384 samples	4393708
	960 samples	4393714
Anode Buffer Container (ABC)	4 packs	4393927
Cathode Buffer Container (CBC)	4 packs	4408256
Septa Cathode Buffer Container	10 units	4410715
Conditioning Reagent	1 pouch	4393718
Hi-Di Formamide	25 mL	4311320
GeneScan 600 LIZ Size Standard v2.0	800 reactions	4408399
Software		
GeneMapper *ID-X* Software v1.7, full installation	1 license	A71700
GeneMapper *ID-X* Software v1.7, client installation	1 license	A71701
GeneMapper *ID-X* Software v1.7, full upgrade	1 license	A01700
GeneMapper *ID-X* Software v1.7, client upgrade	1 license	A01701
	5 licenses	A01705
	10 licenses	A01710

* Additional bulk packs available for high-throughput users.

Learn more at **thermofisher.com/hid-seqstudioflex**

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