

© MGI Genetic Sequencers



E25
Reads per flow cell: 25 M
Number of flow cells: 1
Data output: 2.5-7.5 Gb

DNBSEQ E Series Sequencer



G50
Reads per flow cell: 100-500 M
Number of flow cells: 1
Data output: 10-150 Gb



G400
Reads per flow cell: 300-1800 M
Number of flow cells: 2
Data output: 55-1440 Gb



G99
Reads per flow cell: 40-160M
Number of flow cells: 2
Data output: 8-192Gb

DNBSEQ G Series Sequencer



T7
Reads per flow cell: 5800 M
Number of flow cells: 4
Data output: 1-7 Tb



T20x2
Reads: 40 B
Number of sides: 6
Data output: 42-72 Tb



T1+
Reads per flow cell: 500-2000M
Number of flow cells: 2
Data output: 25 Gb-1.2 Tb

DNBSEQ T Series Sequencer

*Unless otherwise informed, this StandardMPS sequencing reagent is not available in Germany, UK, Sweden, and Switzerland.

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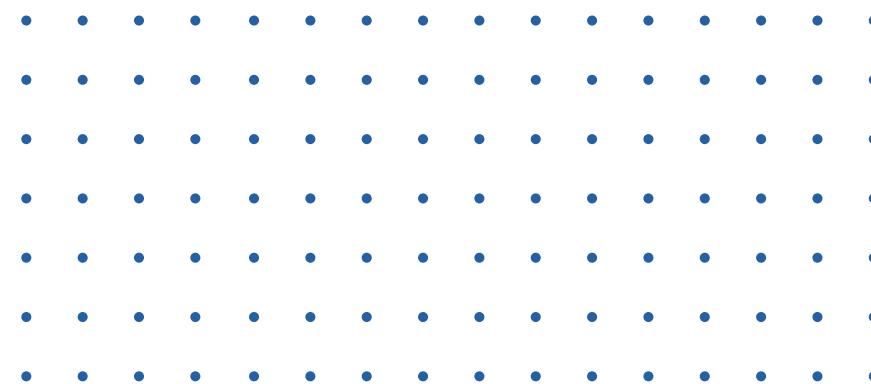
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Turbocharge Your Sequencing

High-speed, high flexibility and ultra-high throughput



T7*



High-speed
22 to 24 HOURS for PE150 sequencing



High-flexibility
4 FLOWCELLS, PE150 and PE100
at the same time



Ultra-high Throughput
up to 7 T/DAY,
High quality data 24/7

Leading Life Science Innovation

© ABOUT T7*

© ABOUT MGI Tech Co., Ltd.

MGI Tech Co., Ltd. (or its subsidiaries, together referred to MGI), is committed to building core tools and technologies that drive innovation in life science. Our focus lies in research & development, manufacturing, and sales of instruments, reagents, and related products in the field of life science and biotechnology. We provide real-time, multi-omics, and full spectrum of digital equipment and systems for precision medicine, agriculture, healthcare and various other industries.

Founded in 2016, MGI has grown into a leader in life science, serving customers across six continents and have established research, manufacturing, training, and after-sales service facilities globally. MGI stands out as one of the few companies capable of independently developing and mass-producing clinical-grade gene sequencers with varying throughput capacities, ranging from Gb to Tb levels. With unparalleled expertise, cutting-edge products, and a commitment to global impact, MGI continues to shape the trajectory of life sciences into the future.

As of June 30, 2025, MGI has a team over 2,277 employees, with research and development personnel accounting for approximately 29.21%. Our business spans over 110 countries and regions worldwide, serving more than 3,560 users.

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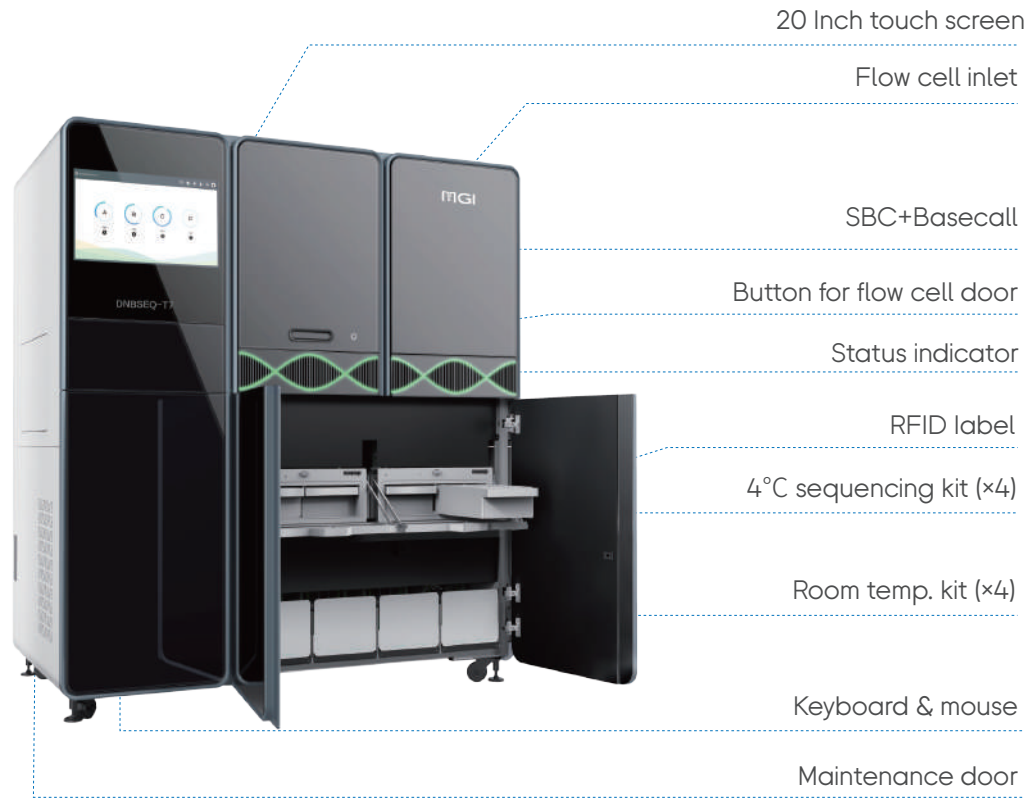
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INTRODUCTION

T7*

T7* can generate 1-7T of high quality data per day, for a wide range of applications including whole genome sequencing, deep exome sequencing, epigenome sequencing, transcriptome sequencing, and targeted panel projects.

Powered by 4-color and DNBSEQ™ Technology, T7* makes sequencing more efficient and productive with advances in biochemical, fluidics, and optical systems.



DL-T7

DL-T7 is an essential auxiliary product for T7*. The device is used to prepare sequencing Flow Cells by loading the prepared DNB (DNA Nanoball) and/or reagent to a Flow Cell. It loads one or two Flow Cells in less than 2 hours.

Dimensions 430 mm x 780 mm x 750 mm

Net Weight 81 kg



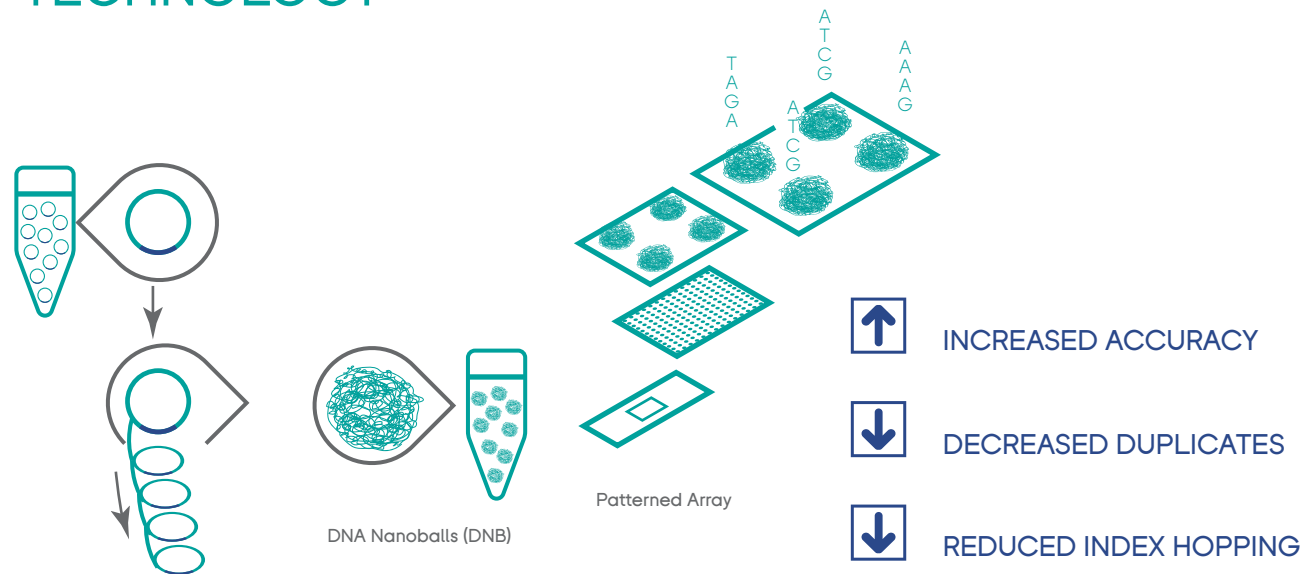
T7* Specifications

4 Flow Cells/run, 1 lane/Flow Cell, ≥5800 M max reads/Flow Cell*.

Read lengths	PE100	PE150
Data Output	1.16-4.64 T	1.75-7 T
Q30**	> 85%	> 85%
Run Time***	16-18 H	22-24 H ▲

- ▲ 24H sequencing time is based on using T7 High-throughput Sequencing Reagent Kit V3.0 and FPGA server.
- * Effective reads and Q30 are based on the standard library. These values may vary depending on various applications
- ** The percentage of base above Q30 is the average of an internal standard library over the entire run. The actual performance is affected by factors such as sample type, Library quality, and insert fragment length.
- *** Run time includes Flow Cell loading, sequencing, and outputting Cal. File. Cal. is a binary file format generated by MGI sequencer basecall software.

MGI'S PROPRIETARY
DNBSEQ™
TECHNOLOGY



WGS Total Package



MGI SP series

MGI series include **SP-100** and **SP-960**, the throughput is 16 samples/run and 96 samples/run respectively, which can perform nucleic acids extraction and library preparation.



DL-T7

DL-T7 is an essential auxiliary product for T7*, it loads DNB and/or reagents onto the flow cell to complete the preparation of sequencing.



T7*

Sequencing operation contains two main steps. Including manual operation and automatic operation.

Manual operation: (*user login and choose sequencing mode)

- automatic sequencing – automatic washing – automatic disposing of flow cells

Automatic operation: load flow cell – place reagent kits – click sequence

Manual operation
*user login and choose sequencing model

Automatic operation

1 load flow cell

2 place reagent kits

3 click sequence

4 automatic sequencing

5 automatic washing

6 automatic disposing of flow cells



ZTRON

ZTRON, a Data Analysis Appliance: provides edge computing and storage packages. ZTRON executes bioinformatics analysis, data governance and data delivery. Data generated by T7* can be automatically uploaded to ZTRON and generate reports.

MGI provides a total package for whole genome sequencing. T7* is compatible with a variety of products covering the whole processes from sample pretreatment, library preparation, DNB loading, sequencing and data processing (ZTRON Pro), making WGS easy and accessible.



ZLIMS

Zebra LIMS (Laboratory Information Management System) enables real-time sample tracking throughout the workflow, offering an total package from sample to sequencing report.

DATA PERFORMANCE

Whole Genome Sequencing (WGS) Data Performance

Reagent	DNBSEQ-T7RS* High-throughput Sequencing Set (FCL PE100)	Reagent	DNBSEQ-T7RS* High-throughput Sequencing Set (FCL PE150)
Sample	Human Cell Line	Sample	Human Cell Line
Prep Set	MGIEasy PCR-Free DNA Library Prep Set	Prep Set	MGIEasy FS PCR-Free DNA Library Prep Set
Data analysis	MegaBOLT	Data analysis	BWA+GATK
Sample	NA12878	Sample	NA12878
Mapping rate (%)	99.73	Mapping rate (%)	100
Duplicate rate (%)	0.55	Duplicate rate (%)	1.61
Mismatch rate (%)	0.52	Mismatch rate (%)	0.78
Average sequencing depth (X)	30.80	Average sequencing depth (X)	30.57
Coverage (%)	99.23	Coverage (%)	99.16
Coverage at least 4X (%)	99.03	Coverage at least 4X (%)	99.00
Coverage at least 10X (%)	98.61	Coverage at least 10X (%)	98.59
SNP_ Precision	0.9992	SNP_ Precision	0.9993
SNP_ Sensitivity	0.9910	SNP_ Sensitivity	0.9970
Indel _ Precision	0.9894	Indel _ Precision	0.9895
Indel _ Sensitivity	0.9776	Indel _ Sensitivity	0.9827

Sample Throughput Guidance for Key Applications

Flow Cell per run	1	2	3	4
WGS samples/run	9~14	18~28	27~42	36~56
WES samples/run	62~92	124~184	186~276	248~368
Transcriptomes samples/run	~232	~464	~696	~928

* Human Genomes assumes >100 Gb of data per sample to achieve 30x genome coverage;
Exome assumes ~15 Gb/100x;
Transcriptomes assumes ≥ 6 Gb/sample;
Throughput may vary based on library preparation kit used;
Sample numbers are calculated considering pooling variation and applications. For reference only.

APPENDIX

T7* Configurations

	Model	Intended Market
Model*	T7	IVD
	T7RS*	RUO
Dimensions	1656 mm (L) × 903 mm (W) × 1815 mm (H)	
Net Weight	765 Kg	
Power	Type	200~240 V, 50/60 Hz, 30 A
	Rated Power	3000 VA
Operating Environment Requirements**	Temperature	19~25 °C,<2 °C change per hour
	Relative Humidity	30%RH ~ 80%RH, non-condensing
	Atmospheric Pressure	80 kPa~106 kPa
	Waterproof Rating	IPX0
	Altitude	Below 2000 meters
Floor bearing capacity***	≥650 Kg/m²	
Control Computer Configurations****	CPU	Intel CORE I7-7700 4Core x2 3.6GHz
	Internal Storage	16 GB RAM
	HDD	1 TB
	SSD	128 GB
	Operating System	Windows 10
Bandwidth for Network Connection	300 MB/s	For local storage network uploads
	1000 MB/s	For Fastq computing uploads

* For research use only. Not for use in diagnostic procedures.
** For indoor use only, the Flow Cell can be stored and transported at 0~30 °C. No liquid medium is needed.
*** Please install DNBSEQ-T7 above the bearing beam.
**** Supporting the computer configurations and system updates.

Technical Support Available Globally



Local technical support and Customer Experience Centers (CECs) have been established in multiple countries and regions worldwide to ensure timely and effective technical support and training.



Local warehouses and spare part centers have been established in multiple countries and regions worldwide to ensure the continuous availability of machine parts for maintenance.



Online technical support is available globally with a fully functional call center (Toll-Free Hotline 4000-688-114) accessible during workdays from 9:00 AM-12:00 PM and 13:00 PM-18:00 PM (Beijing time, GMT+8).



Providing installation services and system verification services as needed to ensure smooth implementation and operation. The value-added services are available for personalized services such as secondary relocation.



Responsible for any failure caused by non-human factors and non-force majeure factors within the warranty.



Providing instrument preventive maintenance services within the warranty period, along with a host of available extended warranty support plans to ensure optimal performance and reliability.

Ordering Information

Product Information	Cat. No.
MGIDL-T7RS ⁺	900-000134-00
DNBSEQ-T7RS ⁺	900-000242-00
MGIDL-T7	900-000133-00
DNBSEQ-T7	900-000241-00
DNBSEQ-T7RS High-throughput Sequencing Set (FCL PE100) ⁺	940-000269-00
DNBSEQ-T7RS High-throughput Sequencing Set (FCL PE150) ⁺	940-000268-00
DNBSEQ-T7RS High-throughput Sequencing Set (APP-A FCL PE100) ⁺	940-000298-00
DNBSEQ-T7RS High-throughput Sequencing Set (APP-A FCL PE150) ⁺	940-000300-00

⁺For research use only. Not for use in diagnostic procedures

For more ordering information, please contact your local sales representative.