

ALL in 24 Hours

T-level  
Benchtop  
Sequencer **T1+**



MGI Tech Co., Ltd.

Building 11, Beishan Industrial Zone, Yantian District,  
Shenzhen, CHINA, 518083

+86-4000-688-114

en.mgi-tech.com

MGI-service@mgi-tech.com



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MGI

ALL in 24 Hours

T-level  
Benchtop  
Sequencer

**T1+**



For Research Use Only. Not for use in diagnostic procedures

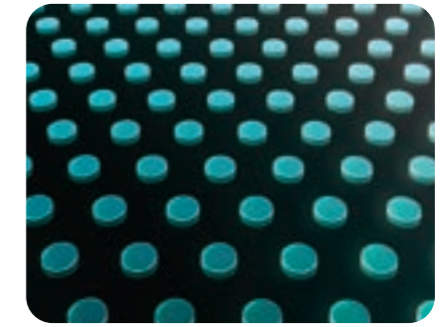
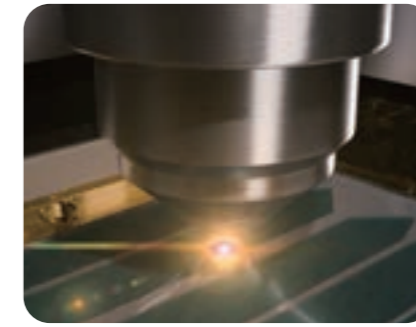
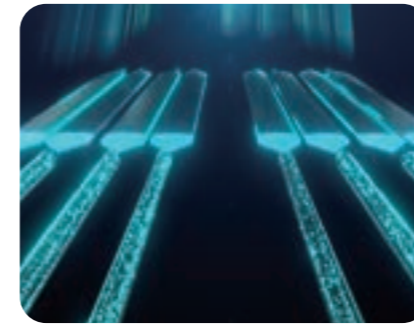


# Rapid

## Accelerate the Entire Workflow of Genomics



T1+ is one of the fastest T-level benchtop sequencers globally, capable of producing 1.2Tb sequencing data within 24 hours, achieving ultimate improvements in sequencing efficiency, quality, and delivery capabilities, and accelerating the entire genomics workflow.



### Equivalent Data Output in 1/4 of The Time

> **2**<sup>↑</sup> times

High-Efficiency Fluidic System

#### Fluidics

Delivers extreme flow rates, with an optimized design to save reagents

> **3**<sup>↑</sup> times

Low-Noise High-Speed TDI Scanning

#### Optical

Ultra-Fast Optical Signal Processing

> **2**<sup>↑</sup> times

Ultra-High-Density Array Flow Cell

#### Flow cell

Ultra-High-Density Minimizing Scanning Area

## PE150 Within One Day, SE50 Within One Shift

### SE50 Sequencing

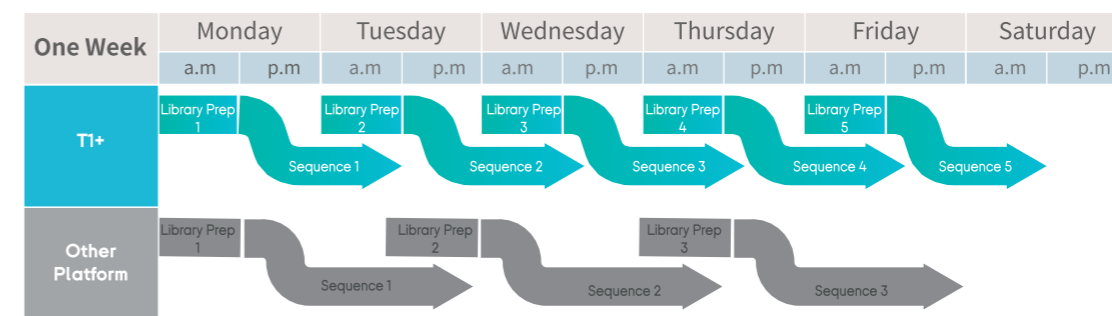


### PE150 Sequencing



## T1+ > 4 x Platform N

T1+ (PE150<24h): Easy to set up Daily sequencing routine  
Other platforms (PE150 31~48h): Hard-to-follow working pattern



**2600** Samples/Year

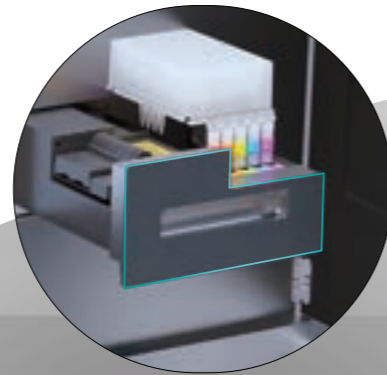
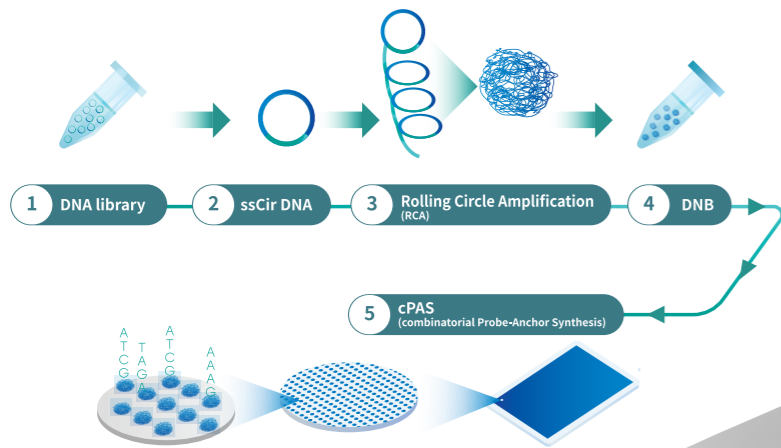
624 Samples/Year

For 30X WGS(FCL PE150)  
T1+ Power: 10 FCs/Week, 5 Run/Week  
Platform N: 3 FCs/Week

# Simple

## Integrated DNB make & load Module

Ti+ introduces the new DNB M&L (DNB Make & Load) functional module, integrating DNB preparation and loading directly into the sequencer. It enables high-quality, one-click DNB preparation with results ready for sequencing.



## DNA Library-to-FastQ in 24 Hours

### Library Prep

Load Consumables  
Run Start  
DNB Make & Load automatically

### Sequencing

Integrated sequencing and cleaning

### Results

FastQ Generation

Ready for Next Run

ARS: Incorporating secondary analysis (WGS/WES)



Place the sequencing flow cell onto the flow cell stage  
Ensure that the holes on the sequencing flow cell are aligned with the alignment pins on the stage.

Push in the sequencing reagent cartridge 2&3  
Push in slowly and evenly.

Place samples and reagents  
Remove the sealing film from sequencing reagent cartridge 1 and pay attention to the direction of holes. Remove the sample tube caps and place the tubes into the corresponding holes in ascending order. Remove the cap from the cap and place the tubes into the corresponding holes according to the color of the label.

## Dynamic Island

Status Display

Guided User Instruction

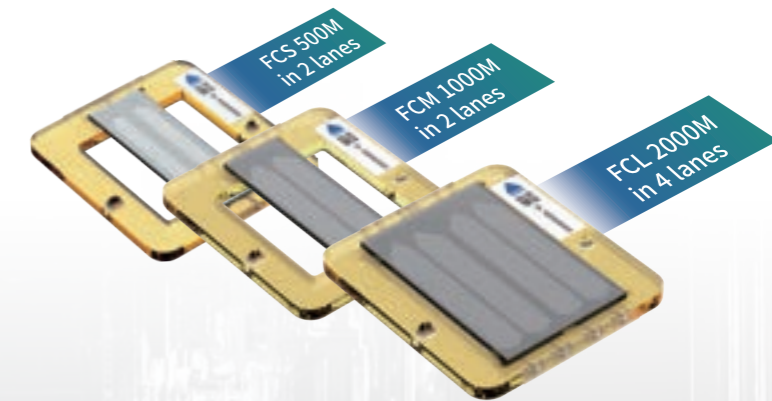
Customizable

DNB Make Reagents, Samples  
Sequencing Reagent  
Flow Cell

# Flexible

## Individually Addressable Lanes and Automatic Loading System

The T1+ sequencing system offers three flow cell specifications (“Large-Medium-Small”): FCS, FCM, and FCL. Each flow cell can independently run different sequencing read lengths or application types. T1+ is equipped with an independent and specific lane loading system and also supports various library types (dsDNA, ssCirDNA, DNB).



### Dual Flow Cell

Support three loading methods (single-sided/double-sided/rolling)

### Dual-Configuration

RS: Support standard FastQ File Output  
ARS: Support secondary analysis (WGS/WES)

### Custom Primer

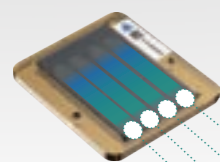
Support custom primers to sequence converted third-party libraries

### Multiple Input Types

dsDNA  
ssCirDNA  
DNB

### No Barcodes Required

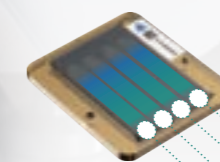
Different types of samples (One sample/lane)



WGS  
WGBS  
WGS  
WGBS

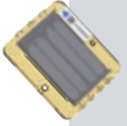

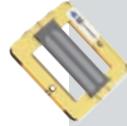
### Multiplex Multi-application

Mixed samples (N samples/lane)



Transcriptomics (20 samples)  
WES (8 samples)  
Oncology panel (12 samples)  
Microbial WGS (120 samples)

# Performance Specifications

Flow Cell Type****	Lanes/- Flow cell	Effective Reads*/ Flow Cell	Read Lengths	Data Output	Q30**	Q40**	Run Time***
 FCL	4	2000M	SE50/App-D SE50	100Gb ~ 200Gb	> 93%	> 90%	7h
			SE100/App-D SE100	200Gb ~ 400Gb	> 93%	> 90%	9.5h
			PE150/App-D PE150	600Gb ~ 1.2Tb	> 93%	> 90%	24h
 FCM	2	1000M	App-D SE100	100Gb ~ 200Gb	> 93%	> 90%	7h
			App-D PE150	300Gb ~ 600Gb	> 93%	> 90%	19.5h
 FCS	2	500M	App-D SE100	50Gb ~ 100Gb	> 93%	> 90%	6.5h
			App-D PE150	150Gb ~ 300Gb	> 93%	> 90%	19h
			App-D PE300	300Gb ~ 600Gb	> 85%	> 75%	35h

\* The effective reads are based on the sequencing of an internal standard library. Actual output may vary depending on sample type and library preparation method.  
 \*\* The percentage of bases above Q30, Q40 and run time is the average of an internal standard library over the entire run. Actual performance is affected by factors such as sample type, library quality, and insert fragment length.  
 \*\*\* The sequencing time is the statistical duration from ssCirDNA library to Fastq. FCM and FCS are theoretical estimates of duration.  
 \*\*\*\* FCS: Available in H2 2025. FCS PE300 and FCM: Available in H1 2026.

# Application Recommendations

Application type	Recommended data size	Recommended read length	DNBSEQ-T1+		
			Max. Flow Cells/RUN: 2		
			1*FCS 500M reads	1*FCM 1000M reads	1*FCL 2000M reads
NIPT/PGS	10M reads/sample	SE50/SE100	40	80	160
RNA-Seq	25M reads/sample	SE50	16	32	64
Metagenomics for pathogen detection	20M reads/sample	SE50/SE100	20	40	80
Single cell RNA-Seq	10K cells, 50K reads/cell, 500M/sample		1	2	4
Oncology panel	10Gb/sample (5000X, 1Mb panel)		12	24	48
Companion Diagnostic Onco panel	1 Gb/sample		120	240	480
Microbial WGS	1 Gb/sample		120	240	480
ATO Plex Panel	Respiratory tract panel/ COVID-19 panel: 5M reads/sample	PE150	80	160	320
Transcriptomics	6 Gb/sample		20	40	80
WES	100X average sequencing depth 15 Gb/ sample		8	16	32
WGS	30X average sequencing depth 100 Gb/ sample		1	2	4
WGBS	30X average sequencing depth 120 Gb/ sample		1	2	4
Oncology targeted methylation panel	5 Gb/sample (2000X, 0.5Mb panel)		24	48	96
16S	0.1M reads/ sample	PE300	1152 (576/lane)	/	/

\*Recommended data output and sample numbers are only for reference, actual application will require optimisation adjustments.

# Sequencer System Parameter

# Ordering information

Indicator	Product Parameter	
Product Model	T1+	Outputs FASTQ files
	T1+ARS	Equipped with bioinformatics module for advanced analysis
Dimensions	1150mm(W)x 816mm(H) x 750mm(D)	
Net weight	295 kg	
Main Screen	Type	LCD
	Size	21.5 inches
	Resolution	1920 x 1080 pixels
Secondary Screen	Type	LCD
	Size	19 inches
	Resolution	1920 x 360 pixels
Power	Power Type	200-240 V~
	Frequency	60 / 50 Hz
	Rated Power	2000 W
Operating environment requirements	Temperature	15 °C ~ 30 °C
	Relative humidity	20% RH ~ 80% RH, non-condensing
	Atmospheric pressure	80 kPa ~ 106 kPa
Storage/transportation	Temperature	-20 °C ~ 50 °C
	Relative humidity	15% RH~85% RH, non-condensing
	Atmospheric pressure	70k Pa ~ 106 kPa

## RUO\*

Product Number	Product Name
900-000991-00	Genetic Sequencer DNBSEQ-T1+RS
900-000992-00	Genetic Sequencer DNBSEQ-T1+ARS
940-002566-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL PE150)
940-002565-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL SE100)
940-002570-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL SE50)
940-002576-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL PE150)
940-002569-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL SE100)
940-002572-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL SE50)

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## IVD

Product Number	Product Name
900-000989-00	Genetic Sequencer DNBSEQ-T1+
940-002760-00	Universal Sequencing Reaction Kit (T1+ FCL PE150 )
940-002764-00	Universal Sequencing Reaction Kit (T1+ FCL SE100)
940-002752-00	Universal Sequencing Reaction Kit (T1+ FCL SE50)
940-002751-00	Universal Sequencing Reaction Kit (T1+ App-D FCL PE150)
940-002765-00	Universal Sequencing Reaction Kit (T1+ App-D FCL SE100)
940-002768-00	Universal Sequencing Reaction Kit (T1+ App-D FCL SE50)

# About MGI Tech Co., Ltd.



**2,604+**  
Employees

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.

**31.2%**  
R&D Personnel

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.

**3,300+**  
Customers

As of December 31, 2024, MGI has a team over 2,604 employees, with research and development personnel accounting for approximately 31.2%. Our business spans over 110 countries and regions worldwide, serving more than 3,300 users.

**110+**  
Countries & Regions

**Vision**      Leading Life Science Innovation

**Mission**      To Develop and Promote Advanced Life Science Tools for Future Healthcare

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.

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).

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.

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

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.

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.