

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



global-mgitech.com

MGI-service@mgitech.com

Version: 20260506

The copyright of this brochure is solely owned by MGI Tech Co., Ltd..The information included in this brochure or part of, including but not limited to interior design, cover design and icons, is strictly forbidden to be reproduced or transmitted in any form, by any means (e.g. electronic, photocopying, recording, translating or otherwise) without the prior written permission by MGI Tech Co., Ltd..



ALL in 24 Hours

T-level
Benchtop
Sequencer

T1+

CB CE EAC NMPA



For Research Use Only. Not for use in diagnostic procedures

T1+

T1+ is one of the fastest T-level benchtop sequencers globally, developed with MGI's core DNBSEQ™ sequencing technology. T1+ supports dual flow cell concurrent operation, generating up to 1.2 Tb of sequencing data within 24 hours (600 Gb per flow cell, totaling 1.2 Tb for two flow cells). Additionally, T1+ offers an optional built-in bioinformatics module, enabling automated advanced analysis immediately after the sequencing run. This facilitates a tremendously efficient and simple workflow, thus accelerating the application of omics technology to advance global life sciences and clinical research.



MGI'S PROPRIETARY
DNBSEQ™
TECHNOLOGY

T1+



Rapid



24 Hours

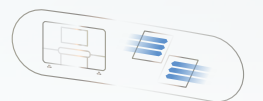
PE 150 < 24 Hours
1.2Tb/Run
Q40 > 90%

Simple



Integrated DNB Make & Load Module
Reagent Kit One-step Operation
Integrated Sequencing and Cleaning

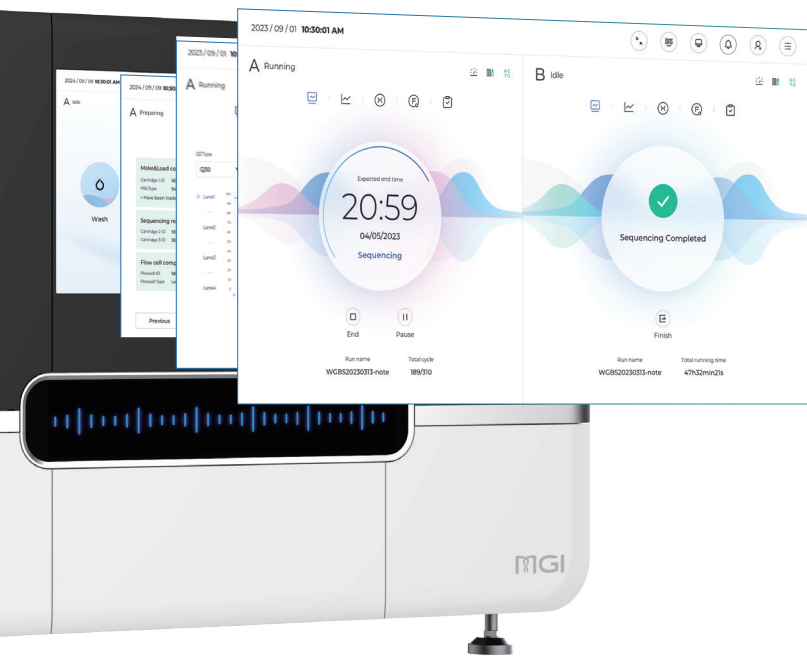
Flexible



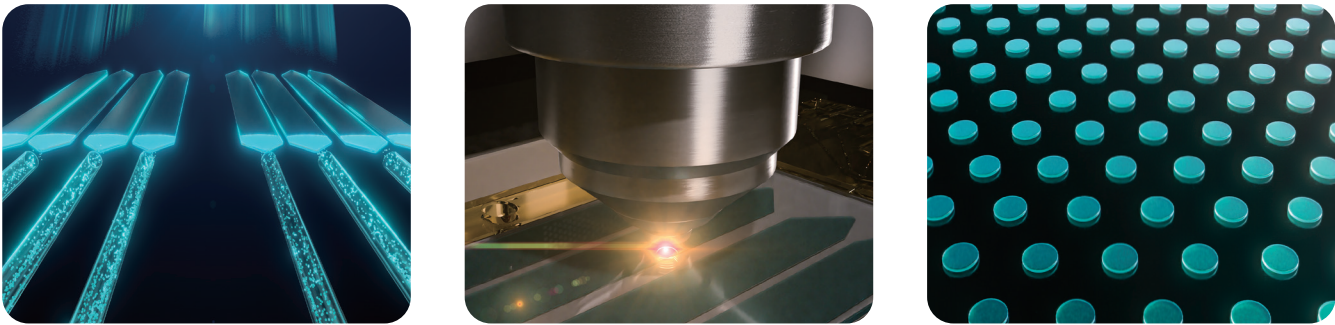
Individually Addressable Lanes
Dual-Flow Cell
Dual-Configuration

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[↑] times

High-Efficiency Fluidic System

Fluidics

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

>3[↑] times

Low-Noise High-Speed TDI Scanning

Optical

Ultra-Fast Optical Signal Processing

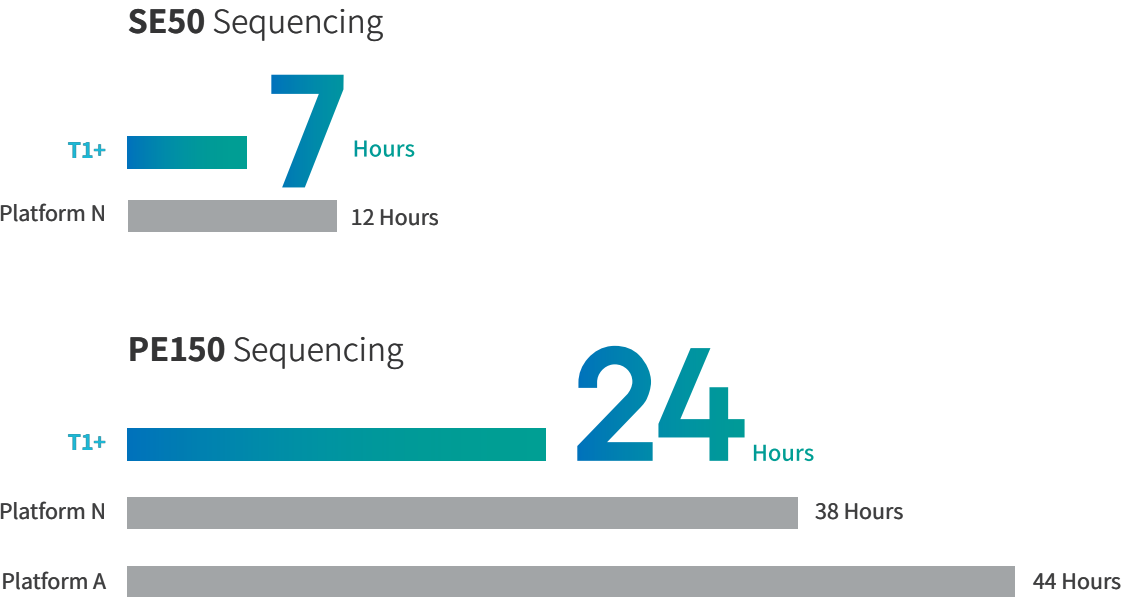
>2[↑] times

Ultra-High-Density Array Flow Cell

Flow cell

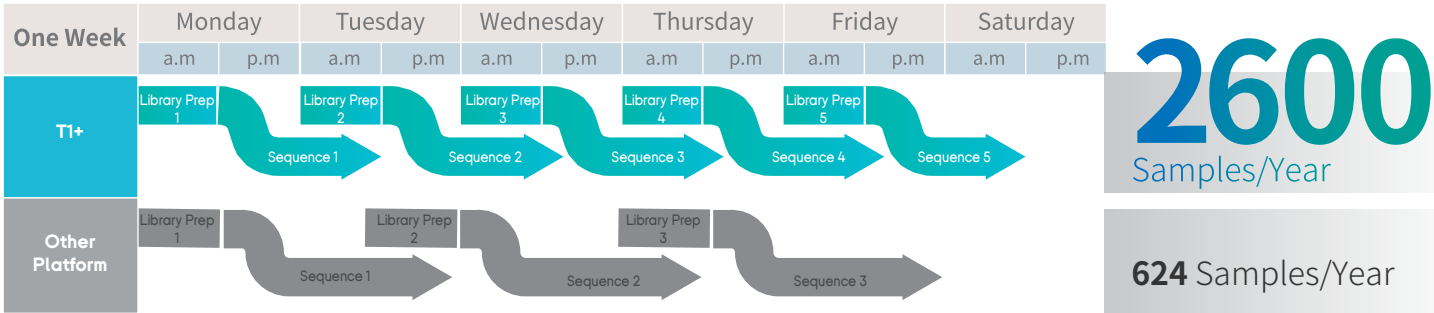
Ultra-High-Density Minimizing Scanning Area

PE150 Within One Day, SE50 Within One Shift



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

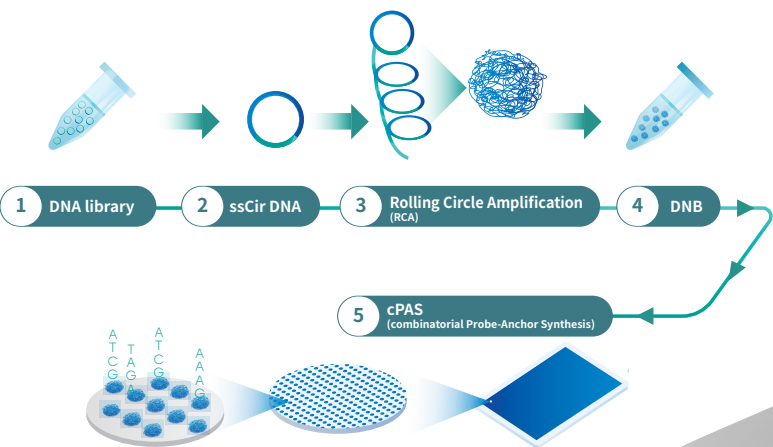


For 30X WGS(FCL PE150)
T1+ Power: 10 FCs/Week, 5 Run/Week
Platform N: 3 FCs/Week

Simple

Integrated DNB make & load Module

T1+ 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: Built-in secondary
analysis (WGS/WES/RNA)



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 steady

Place samples and reagents

Remove the sealing film from sequencing reagent cartridge 1 and pay attention to the direction of notch
Remove the sample tube caps and place the tubes into the corresponding holes in ascending order
Remove the cryotube caps and place the tubes into the corresponding holes according to the color of the labels

Dynamic Island

Status Display

Guided User Instruction

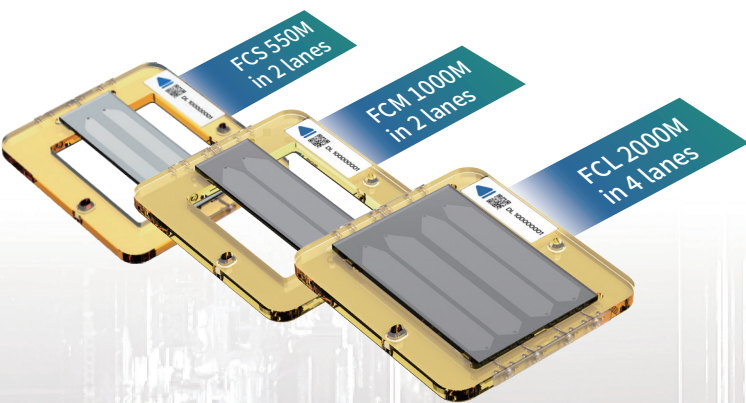
Customizable

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/RNA)
*Optional add-ons: PFI, MGAP, and MetaSIS (expected to be available in H1 2026)

Custom Primer

Support custom primers to sequence converted third-party libraries

Multiple Input Types

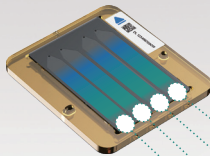
dsDNA
ssCirDNA
DNB

No Barcodes Required

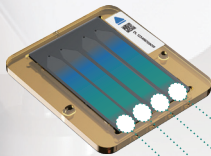
Different types of samples (One sample/lane)

Multiplex Multi-application

Mixed samples (N samples/lane)

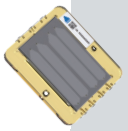
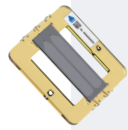
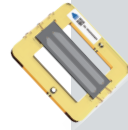


WGS
WGBS
WGS
WGBS



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
	STO	1800M~2000M	STO PE75	180Gb ~540Gb	> 93%	> 90%	15.5h
 FCM	2	1000M	App-D SE100	270Gb~600Gb	> 93%	> 90%	8.5h
			App-D PE150	300Gb ~ 600Gb	> 93%	> 90%	20h
 FCS	2	550M	App-D SE100	55Gb ~ 110Gb	> 93%	> 90%	7.5h
			App-D PE150	165Gb ~ 330Gb	> 93%	> 90%	19h
			App-D PE300	330Gb ~ 660Gb	> 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 instrument is equipped with SE50 and PE100 sequencing modes, and the existing reagent kits support SE50 and PE100 read length sequencing.
***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.
****Run time is calculated based on the dual-slide mode, referring to the statistical duration from ssCirDNA library to FastQ. FCM and FCS are theoretical estimates of duration.
*****FCS PE300 is expected to be launched in 2027, and FCM is expected to be launched in 2028.

Application Recommendations

Application type	Recommended data size	Recommended read length	DNBSEQ-T1+		
			Max. Flow Cells/RUN: 2		
			1*FCS	1*FCM	1*FCL
			550M reads	1000M reads	2000M reads
NIPT/PGS	10M reads/sample	SE50/SE100	44	80	160
RNA-Seq	25M reads/sample	SE50	16	32	64
Metagenomics for pathogen detection	20M reads/sample	SE50/SE100	22	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		132	240	480
Microbial WGS	1 Gb/sample		132	240	480
ATO Plex Panel	Respiratory tract panel/ COVID-19 panel: 5M reads/ sample	PE150	88	160	320
Transcriptomics	6 Gb/sample		22	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)		26	48	96
16S	0.1M reads/ sample	PE300	4400 (2200/lane)	/	/

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

Sequencer System Parameter

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 750.3mm(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 VA
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
Radio-Frequency Identification	Short-Range Radio-Communication Devices	865 ~ 868 MHz

Ordering information

RUO*

Product Number	Product Name
900-000991-00	Genetic Sequencer DNBSEQ-T1+RS
900-000992-00	Genetic Sequencer DNBSEQ-T1+ARS
940-002979-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL PE150)
940-002980-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL SE100)
940-002981-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ FCL SE50)
940-002982-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL PE150)
940-002983-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL SE100)
940-002984-00	DNBSEQ-T1+RS High-throughput Sequencing Reagent Set (T1+ App-D FCL SE50)
940-003014-00	DNBSEQ-T1+RS Stereo-seq Visualization Reagent Set (T1+ STO FCL PE75)
940-003021-00	DNBSEQ-T1+RS High-Throughput Sequencing Reagent Set (T1+ App-D FCS PE150)
940-003022-00	DNBSEQ-T1+RS High-Throughput Sequencing Reagent Set (T1+ App-D FCS SE100)

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

CE-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)
940-003025-00	Universal Sequencing Reaction Kit (T1+ App-D FCS PE150)
940-003026-00	Universal Sequencing Reaction Kit (T1+ App-D FCS SE100)

About MGI Tech Co., Ltd.



2,195

Employees

26.06%

R&D Personnel

3,800+

Customers

110+

Countries & Regions

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 December 31, 2025, MGI has a team over 2,195 employees, with research and development personnel accounting for approximately 26.06%. Our business spans over 110 countries and regions worldwide, serving more than 3,800 users.

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.

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.

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.

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).

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.