

# Genetic Sequencer

DNBSEQ-G400\*



Strengthen your daily sequencing capability



**Flexible, stable, and well-qualified,  
offering more choices**

# Product Introduction

DNBSEQ-G400\* is a versatile benchtop sequencer, providing users with comprehensive, flexible, and efficient sequencing options.

DNBSEQ-G400\* sequencer supports a wide range of applications including scientific research, clinical research, disease prevention, environment studies and agriculture, etc., increasing the popularity of high-throughput sequencing systems in medical and scientific research fields.



Multiple choices

- **Dual flow cell system**

One or two flow cells:  
1500 M - 3600 M reads/run

High quality

- **Proven DNBSEQ™ technology**

No error accumulation  
Low amplification bias  
Low index hopping

High speed

- **Short sequencing & time**

FCL SE50 from DNB to FASTQ takes only 14 hours

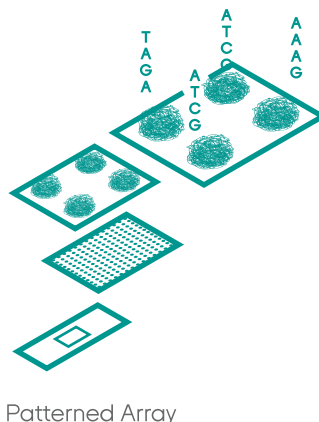
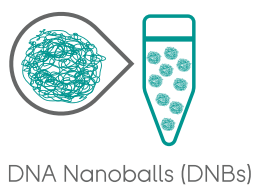
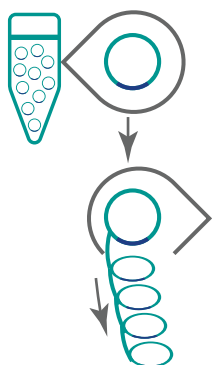
Versatile

- **Wide range of applications**

Suitable for research and clinical applications

## © Technical Principle

### MGI'S PROPRIETARY 「DNBSEQ™」 TECHNOLOGY



- ↑ INCREASED ACCURACY
- ↓ DECREASED DUPLICATES
- ↓ REDUCED INDEX HOPPING

DNA Nanoball sequencing technology - No accumulation of amplification errors

## © Hardware Platform

DNBSEQ-G400\* sequencer utilizes an innovative flow cell system which can support various sequencing modes and an optimized optical and biochemical system that enables the whole sequencing process to be completed within a short period of time, offering the user a simplified and streamlined sequencing experience.



# © Adapted Applications

DNBSEQ-G400\* supports four read lengths, from fertility testing and rapid pathogen detection (SE50, SE100), to tumor detection, transcriptome, WGBS, WES, WGS (PE100), comprehensively cover the application needs of scientific research and clinical fields.

Application Type	Recommended Read Length	Recommended data per sample	Recommended sample numbers* for a single run on DNBSEQ-G400†	
			1*FCL 1800M reads	2*FCL 3600M reads
NIPT	SE50/SE100	10 M reads/sample	144 Samples	288 Samples
Metagenomics for Pathogen Detection	SE50/SE100	20 M reads/sample	72 Samples	144 Samples
Single-cell RNA-Seq	PE100	10K cells, 50K reads/cell, 500 M/sample	2 Samples	4 Samples
Oncology Panel	PE100/PE150	10 Gb/sample (5000X, 1 Mb panel)	44 Samples	88 Samples
Transcriptomics	PE150	6 Gb/sample	72 Samples	144 Samples
WES		100× average sequencing depth, 15 Gb/sample	28 Samples	56 Samples
WGS		30× average sequencing depth, 100 Gb/sample	4 Samples	8 Samples

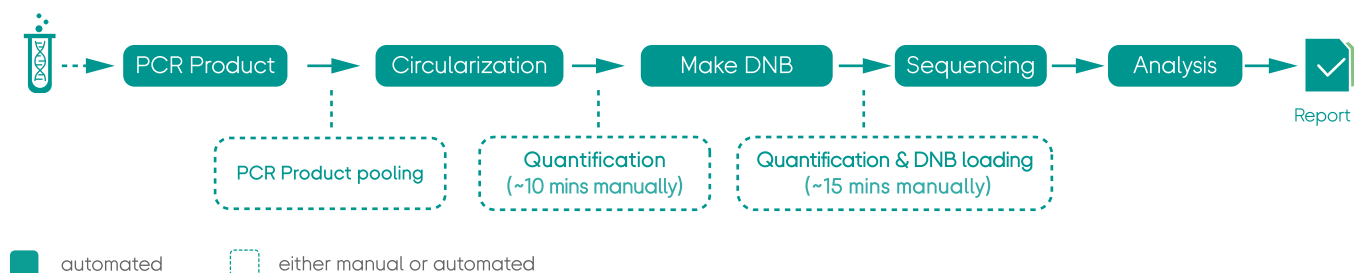
\* Sample numbers are calculated considering pooling variation and applications. For reference only.



# © Total Package

## Versatile Library Prep, Sequencing & Analysis Solution

Genetic Sequencer DNBSEQ-G400\* fully automated workflow (& all scenarios applicable)



## © Highlights

### Efficient

- High efficiency with fully automated comprehensive workflow from sample to report
- Less than 30 mins of manual operations from sample to sequencing

### Intelligent

- ZLIMS controls fully automated workflow from sample to report
- Compatible with multiple MGI and third-party software
- MegaBOLT is compatible with MGI and third-party data

### Flexible

- Multiple sequencing and analysis options to expand application scenarios
- The above equipments can be selected according to needs

# Appendix

## © Hardware Parameters

	Model <sup>1</sup>	Intended Market
Model <sup>1</sup>	DNBSEQ-G400*	IVD
	DNBSEQ-G400RS*	RUO
Dimensions	1086 mm(L)×756 mm(W)×710 mm(H)	
Net Weight	200 kg	
Power	Type	100-240 V, 50/60 Hz
	Rated Power	1200 VA
Operating Environment Requirements <sup>2</sup>	Temperature	19°C-25°C
	Relative Humidity	20% RH-80% RH, non-condensing
	Atmospheric Pressure	70 kPa-106 kPa
	Waterproof Rating	IPX0
Control Computer Configurations <sup>3</sup>	CPU	Intel Xeon E5 10Core 2 2.2GHz
	Internal Storage	256 GB RAM
	HDD	16 Tb
	SSD	480 Gb
	Operating System	Windows 10 Enterprise

1. Only for model classification
2. For indoor use only; The Flow Cells can be stored and transported at room temperature. No liquid medium is needed
3. Supporting the computer's configurations and system updates

## © Ordering Information

RUO\*

Cat. No.	Product Name (Model)
900-000170-00	Genetic Sequencer DNBSEQ-G400RS (DNBSEQ-G400RS)
940-001343-00	DNBSEQ-G400RS High-throughput Sequencing Reagent Set (G400 FCL SE50)
940-001368-00	DNBSEQ-G400RS High-throughput Sequencing Reagent Set (G400 FCL SE100)
940-001344-00	DNBSEQ-G400RS High-throughput Sequencing Reagent Set (G400 FCL PE100)
940-001356-00	DNBSEQ-G400RS High-throughput Sequencing Reagent Set (G400 FCL PE150)

\*StandardMPS sequencing reagents are available in modified form in Germany, UK, Sweden, and Switzerland.

## © 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.

Industriestrasse 12  
CH-6210 Sursee

[mail@witec.ch](mailto:mail@witec.ch)

T 041 250 53 57



experts in life science products



## MGI Tech Co., Ltd.

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



[en.mgi-tech.com](http://en.mgi-tech.com)



[MGI-service@mgi-tech.com](mailto:MGI-service@mgi-tech.com)

**+86-4000-688-114**

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