

# Introducing the NovaSeq™ X series

The NovaSeq X and NovaSeq X Plus systems are our most powerful high-throughput next-generation sequencers. Breakthrough innovations with new XLEAP-SBS™ chemistry deliver revolutionary throughput, scale, and accuracy with transformative economics. Minimize turnaround time and labor while maximizing productivity with the ultimate sequencing user experience, remarkable sustainability improvements, and operational simplicity.

## Fast facts



### Throughput

Generate more than 20,000 genomes per year on a single system



### Power

Scale large population health studies with thousands to millions of genomes



### Economics

Significant reduction in cost/Gb and cost of ownership

## As compared to NovaSeq 6000

~2.5×

Increase in data throughput

2×

Faster  
NovaSeq X 10B vs NovaSeq 6000 S4

60%

Reduction in cost/Gb including onboard secondary analysis

## NovaSeq X series overview

Two system configurations and three flow cells outputs available for pre-orders starting September 29, 2022.



### NovaSeq X Plus

Dual flow cell processing  
Max capacity of **16 Tb**

### NovaSeq X

Single flow cell processing  
Max capacity of **8 Tb**

Product	Availability
NovaSeq X Plus	Q1 2023
NovaSeq X	Later in 2023

10B Flow Cell (3 Tb)	Q1 2023
1.5B Flow Cell (500 Gb)	H2 2023
25B Flow Cell (8 Tb)	H2 2023

## NovaSeq X Plus specifications

**16 Tb**  
Max output

**128+**  
Genomes per run

**52B**  
Single end reads

**2.5**  
Genomes per hour

# Empowering breakthrough discoveries and insights

The future of genomics has never looked more exciting than with the unveiling of our most advanced and innovative high-throughput sequencing systems. With the NovaSeq X series, expand the possibilities of how far next-generation sequencing can go—exponentially.

Scientists, researchers, and clinicians are invited to dream bigger than ever before. For genetic disease research, cancer studies, and multiomics, you can drive the kind of sequencing depth and scale to revolutionize personalized medicine.

## Cost of sequencing with NovaSeq X sequencers



Since 2001, the cost of DNA sequencing has dropped more than 100,000× from \$100 million USD per human genome to less than \$240 USD with the NovaSeq X sequencers.

<sup>1</sup> Based on list price, 100 Gb/genome to 120 Gb/genome

The NovaSeq X series offers a total cost of ownership that is inclusive of the highest-quality data, flexible onboard analytics with a complete digital workflow, and streamlined operations for efficient sample processing.

# Maximize productivity with the ultimate user experience

The NovaSeq X and NovaSeq X Plus systems utilize thoughtful ergonomic design and usability innovations to minimize the time and labor required to complete projects.

8 individually addressable lanes per flow cell, 16 per run for flexible sample batching

Integrated analysis and 5× lossless data compression with onboard DRAGEN

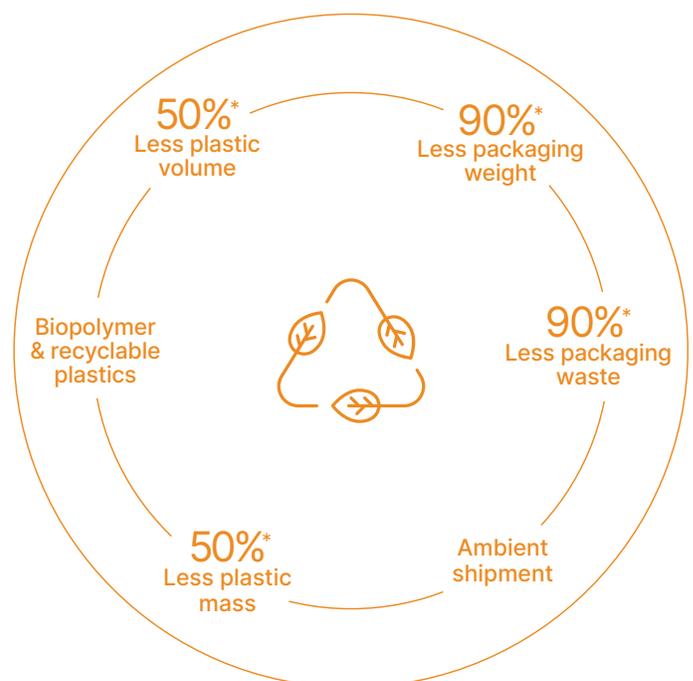
Streamlined digital workflow

Redesigned, simple user experience for increased access

# Sequence more sustainably

Reduced plastic, packaging weight and waste, ambient shipment, and reduced cartridge volumes are helping us set a new standard in sustainability. Spend less time unboxing and discarding waste, and more time sequencing.

\* In comparison to NovaSeq 6000 reagent kits.



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