



NovaSeq™ 6000

illumina®

We set out to create a sequencer with you in mind. One where you won't have to limit the scope or scale of your research. We built it with groundbreaking innovations integrated with our proven sequencing technology. Crafted it to open new possibilities. Made it scalable and flexible for virtually any genome, method, and scale of project. And gave it the ability to sequence more economically than ever before. The future of genomics is here.

It starts with NovaSeq.





THE SEQUENCER YOU'VE BEEN WAITING FOR

The NovaSeq 6000 Sequencing System redefines what's possible in high-throughput sequencing—with scalability and speed that allow you to bring new scientific visions to life. Now, you can use the highest levels of throughput more economically than ever before.

Built with groundbreaking technological innovations that leverage our proven sequencing technology, you can choose the configuration that best suits your ever-evolving needs.

With the highest throughput of any production platform, the NovaSeq 6000 System enables you to power studies with more samples and higher depth of coverage. Plus, with rapid turnaround capabilities available, you now have the ability to get to answers sooner.

SEQUENCING LIKE NO OTHER

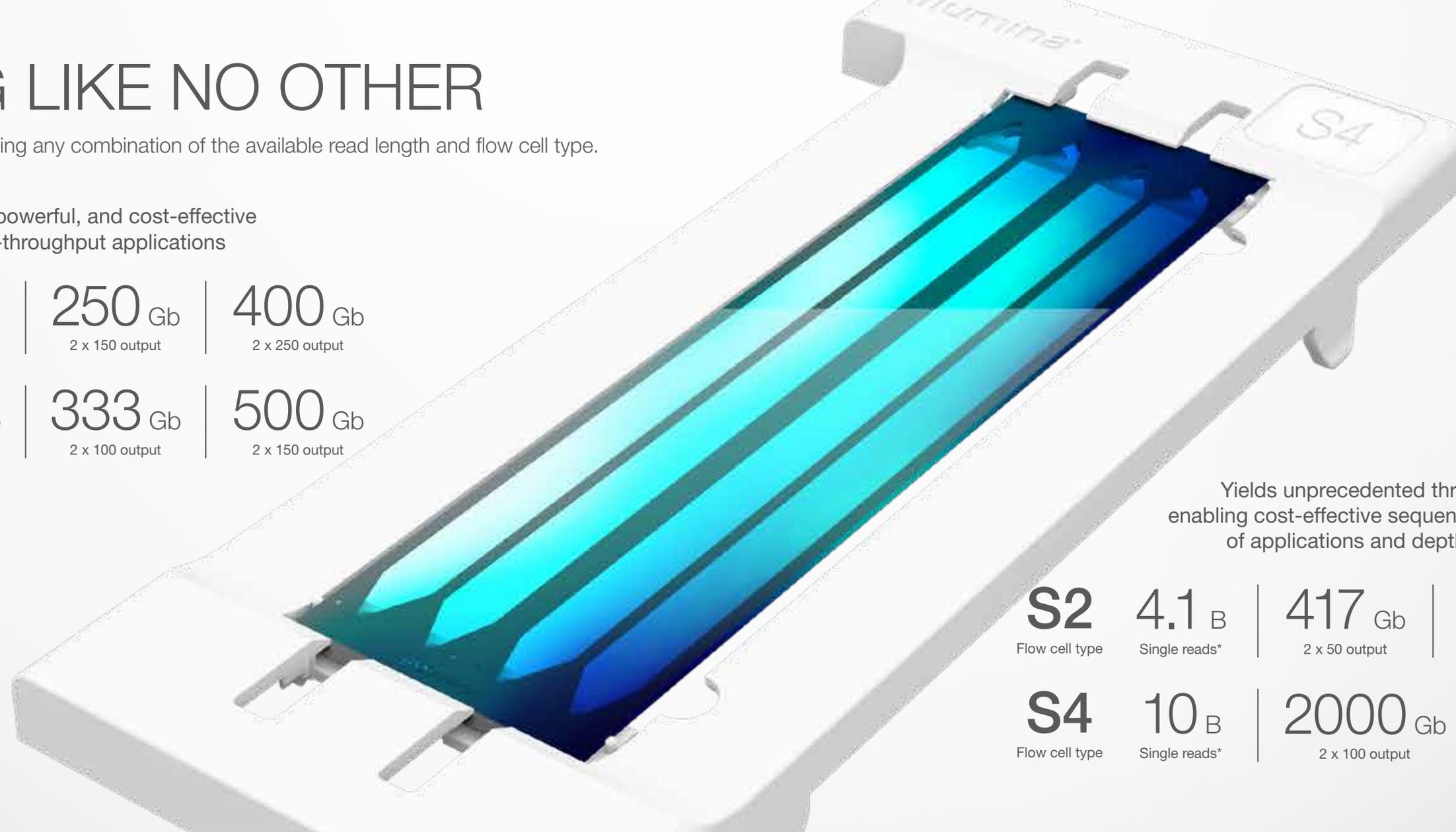
Users can run 1 or 2 flow cells at a time, using any combination of the available read length and flow cell type.

Provides a quick, powerful, and cost-effective option for high-throughput applications

SP	0.8 _B	80 _{Gb}	250 _{Gb}	400 _{Gb}
Flow cell type	Single reads*	2 x 50 output	2 x 150 output	2 x 250 output

S1	1.6 _B	167 _{Gb}	333 _{Gb}	500 _{Gb}
Flow cell type	Single reads*	2 x 50 output	2 x 100 output	2 x 150 output

*Clusters passing filter



Yields unprecedented throughput while enabling cost-effective sequencing across a range of applications and depth of coverage

S2	4.1 _B	417 _{Gb}	833 _{Gb}	1250 _{Gb}
Flow cell type	Single reads*	2 x 50 output	2 x 100 output	2 x 150 output

S4	10 _B	2000 _{Gb}	3000 _{Gb}
Flow cell type	Single reads*	2 x 100 output	2 x 150 output



ONE PLATFORM. INFINITE POSSIBILITIES.

Whether you are interested in high-output applications like whole-genome sequencing (WGS), looking to complete multi-omics studies, or simply operating more cost effectively, the NovaSeq 6000 System empowers you with new possibilities.

The platform is enabled by the broad portfolio of Illumina library preparation kits, providing the flexibility to run your applications at virtually any scale from single cells to an entire population. The NovaSeq 6000 System also supports single-read and paired-end sequencing, with read lengths of up to 2×250 bp—allowing you to adapt the run to meet your study's specific needs. Whether exploring the genome, epigenome, or transcriptome, the possibilities for your research are endless.

A COMPREHENSIVE SEQUENCING ECOSYSTEM

The NovaSeq 6000 System is not only our highest-throughput sequencer, but it is also our most intuitive and easy-to-use high-throughput platform, enabling a streamlined workflow across a broad range of applications.

1 MANAGE WORKFLOW

with BaseSpace™ Clarity LIMS or your existing laboratory information management system (LIMS). The NovaSeq 6000 System is fully supported out of the box with BaseSpace Clarity LIMS while also providing key integration points for a wide variety of third-party LIMS.

2 PREPARE LIBRARIES

with a broad range of high-performance library preparation kits from Illumina. Additionally, the Illumina Qualified Methods program enables easy-to-access automation for key methods.

3 SEQUENCE

prepared libraries on the NovaSeq 6000 System. Get data quality you can trust with proven sequencing by synthesis (SBS) chemistry, more than a decade in the making.

4 ANALYZE DATA

with integration into BaseSpace Sequence Hub. Over 70 open-source and commercial bioinformatics apps support a broad range of experiment types. Share your results in the secure cloud environment.

5 INTERPRET RESULTS

and get the most out of your data, driving scientific discovery with BaseSpace Variant Interpreter and BaseSpace Cohort Analyzer.





“The NovaSeq System gives customers access to power, breadth, and flexibility. This will ignite a whole new set of discoveries.”

FRANCIS DESOUZA, CEO, ILLUMINA

ACCELERATING BREAKTHROUGHS. ENABLING BETTER OUTCOMES.

The NovaSeq 6000 System propels unprecedented progress in genomics—providing the flexibility and scalability to enable comprehensive research studies like never before—from high-resolution single-cell studies to tumor-normal profiles, developing liquid biopsies, and population-scale sequencing.

Together, we can accelerate significant breakthroughs that will increase our understanding of genetic factors underlying the onset and course of disease, resulting in better treatments and improved patient outcomes. Ultimately, we won't just react to illness—we'll optimize our wellness. The NovaSeq 6000 System gets us one step closer to that reality.

A middle-aged man with short, styled grey hair and brown-rimmed glasses is looking directly at the camera with a slight smile. He is wearing a white lab coat over a light blue button-down shirt. In the background, a computer monitor displays a desktop environment with a grid of application icons, including a globe, a mail icon, and a calendar. To the left, another monitor shows a data visualization with a bar chart and a line graph. The scene is set in a bright, professional laboratory or office environment.

THE POWER IS YOURS

Realize your scientific visions and shape the future of genomics with the NovaSeq 6000 System. Providing unprecedented scalability and flexibility, the groundbreaking innovation behind the NovaSeq System charts the path toward broader, more comprehensive studies—enabling you to discover more than ever before.

Explore the NovaSeq 6000 System at www.illumina.com/NovaSeq

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