

LAB  
WAVE

# WAVEQ

## SEQUENCING SYSTEM

The Era of Fourth-Generation Sequencing Has Arrived



WS-Q500



Q30+ Data Quality



Fast Turnaround Time



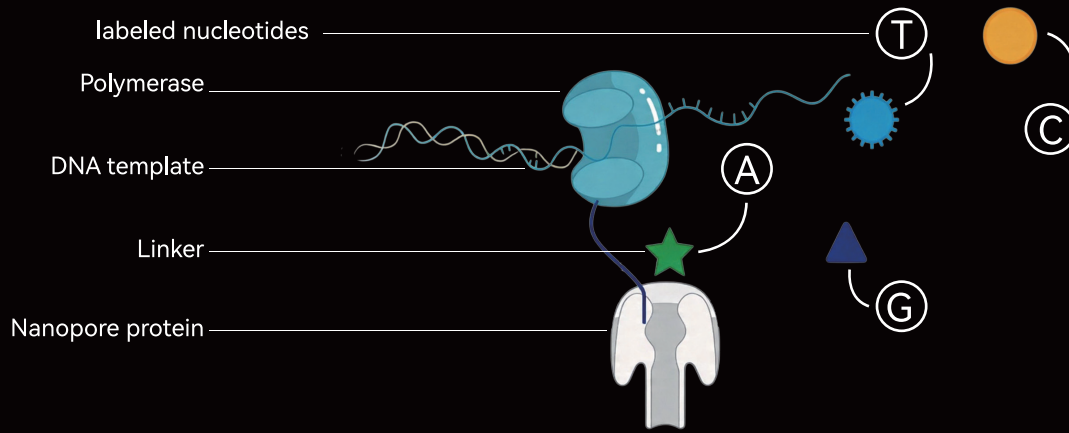
Solid-state Flow Cell



Effortless Operation

# I. TECHNOLOGY

The core of the Single-nucleotide Nanopore Sequencing (SNS) system consists of a nanopore protein, a DNA polymerase, a DNA template, and 4 types of free nucleotides labeled with signal linkers. During sequencing, the polymerase carries out a high-fidelity replication of the DNA template, incorporating one complementary nucleotide each time, during which, the linker attached to the nucleotide is pulled into the nanopore protein and blocks the electric current, generating a characteristic signal corresponding to each nucleotide. Using a specially trained artificial intelligence algorithm to analyze the current signal, the sequencer can obtain the nucleotide sequences of the DNA template.



# II. PRODUCT INFORMATION

## Sequencing Specifications

|                            |                      |
|----------------------------|----------------------|
| Single molecule accuracy   | >99.9% (Q30)         |
| Fragment length            | 20 bp - 15 kb        |
| Sequencing time            | 10 minutes - 5 hours |
| Sequencing channel #       | 512,000              |
| of sequencing run/flowcell | 10 runs              |

## Data Output

|                 |                 |
|-----------------|-----------------|
| Sequencing mode | Reads/Flow cell |
| Standard        | >1.5 M          |
| High throughput | >3 - 4.5 M      |
| Short fragment  | >22.5 M         |

## Device Specifications

|                         |                  |  |
|-------------------------|------------------|--|
| Physical specifications | W x H x D        | 453 mm x 254 mm x 327 mm                 |
|                         | Net Weight       | 20 kg                                    |
| Operating environment   | Temperature      | 18°C~27°C                                |
|                         | Humidity         | 20~80% Relative humidity, non-condensing |
| Power supply            | Voltage          | 220 VAC                                  |
|                         | Frequency        | 50 Hz                                    |
|                         | Rated Power      | ≤450 VA(W)                               |
| Device System           | CPU              | Intel i7 - 12700E                        |
|                         | RAM              | 128 GB                                   |
|                         | Hard Disk        | 1 TB SSD + 7.68 TB SSD                   |
|                         | Operating system | Windows 10                               |

# III. ORDERING INFORMATION

## Product Name

## Package Size

|  |                        |
|--|------------------------|
| WS-Q500 Sequencing System                | /                      |
| G-MK02 Flow Cell                         | 1 piece/box            |
| Universal Sample Preparation Reagent Kit | 10 reactions/kit       |
| Barcode Adapter Kit (10 barcodes)        | 10 reactions/kit       |
| Barcode Adapter Kit (288 barcodes)       | 10 reactions/kit       |
| Universal Sequencing Reagent Kit         | 10 sequencing runs/kit |