

Long-read Sequencing (PacBio)

PacBio SMRT Technology

- Single Molecule Real-Time (SMRT) sequencing
- Watches DNA polymerase in real-time
- Zero-mode waveguides (ZMWs) for detection

Read Length
10-30 Kb

Accuracy
99.9% (HiFi)

Throughput
~30 Gb/run

Advantages

- Sequence through repetitive regions
- Detect structural variants and complex rearrangements
- Better genome assembly - fewer gaps
- Native base modification detection (methylation)