

Extracted
DNA/RNA QC

SSR/Microsatellites
Infectious Disease
Detection

RFLP

Protein Purity
Check

Total RNA QC
Protein Profile
Check

Pathogen Detection
CRISPR Editing QC

PCR Product
Detection

mRNA Vaccine QC

NGS Library QC
Genotyping

Cell-Free DNA QC
Genomic DNA QC

NGS Sample QC

Qsep 100 2.0
Bio-Fragment Analyzer

Qsep100 2.0 Bio-Fragment Analyzer

Qsep100 2.0 Bio-Fragment Analyzer ushers in a new era of capillary gel electrophoresis, combining patented LEDIF detection with full automation to deliver high-resolution, high-sensitivity, and highly reproducible analysis. Its versatile applications cover DNA, RNA, and protein fragments, empowering research across multiple fields. With ready-to-use cartridges, samples in standard PCR tubes or 96-well plates can be directly placed into the instrument for analysis, enabling preparation and operation within three minutes with flexible control of injection, voltage, and run conditions. The system supports throughput from a single sample up to 96 (expandable to 384-well), offering unmatched scalability and efficiency for modern laboratories.

Versatile Bio-Fragment Analysis for DNA, RNA, and Protein Samples.

DNA

- PCR products, cDNA, gDNA, Plasmid DNA, Library samples, cfDNA
- Low concentration sample analysis
- Fragmental quantitative analysis
- Reagent optimization

RNA

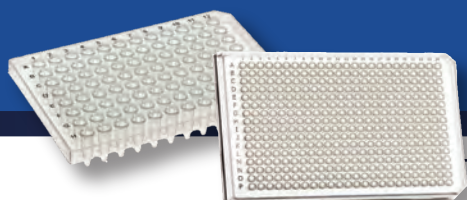
- Total RNA QC (with RQN)
- RNA fragment analysis
- Low concentration analysis

Protein

- Profiling check
- protein purity analysis



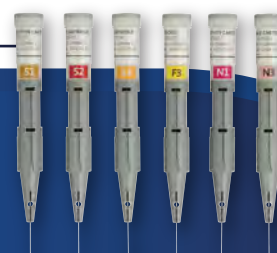
 Upgraded lighting for clearer sample view



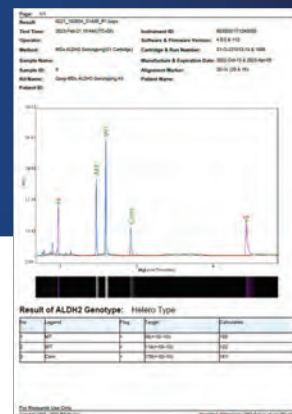
Flexible Throughput:
Supports 1–96
(Customized 384-well available)



Automatic Report Generation

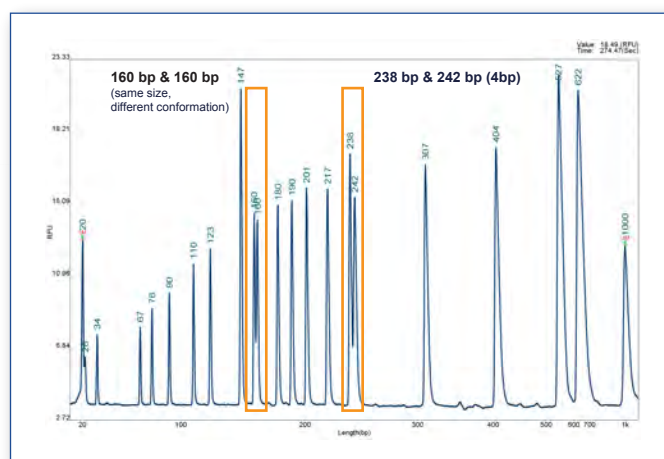


 **EASY-SWITCH consumables**



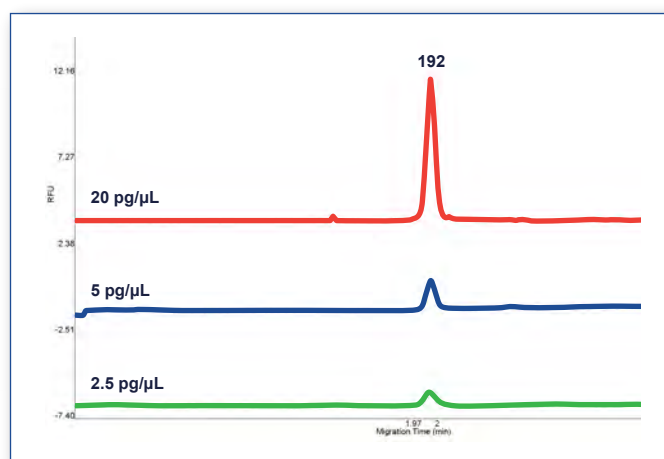
High Resolution

S1 cartridge enables high-resolution DNA separation — 238/242 bp difference and 160 bp conformers for in-depth analysis



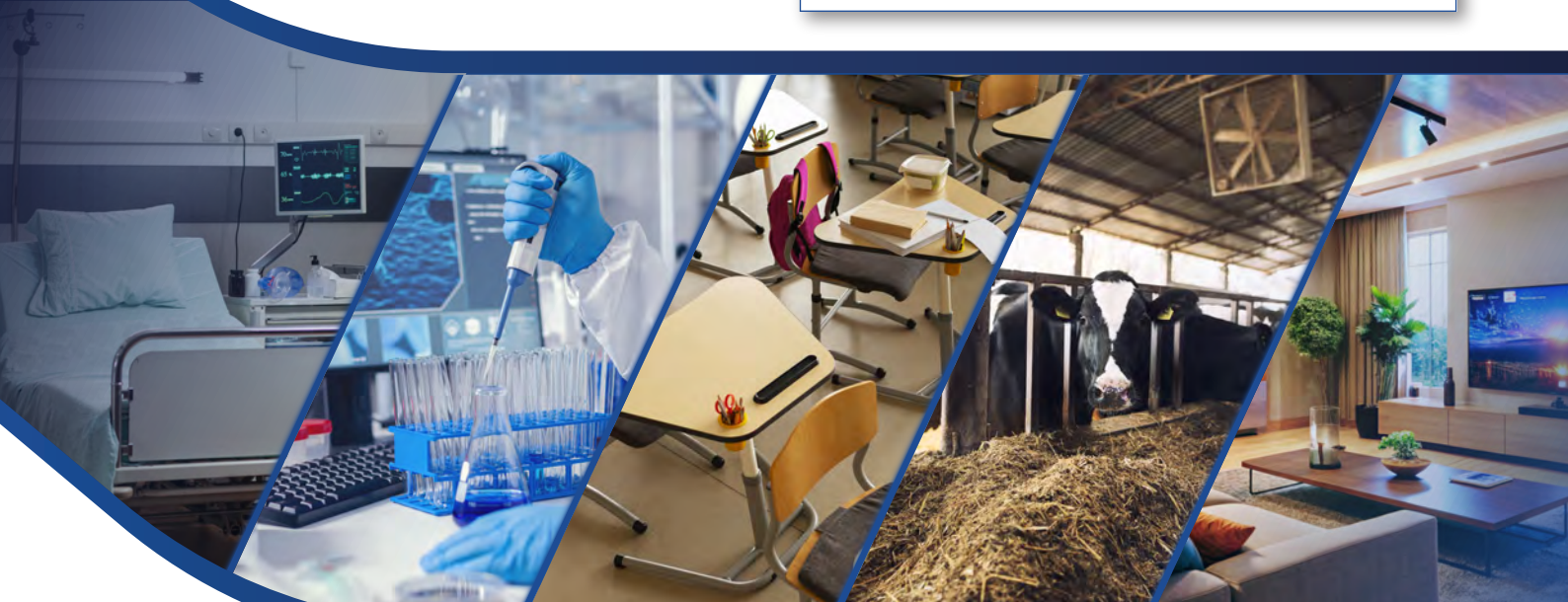
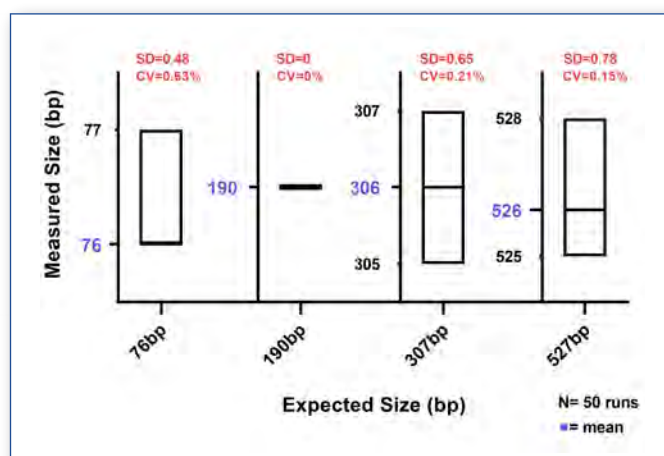
High Sensitivity

With high sensitivity cartridge, the detection capacity can reach 5 pg/ μ L — suitable for low concentration samples such as cfDNA and FFPE DNA /RNA



High Reproducibility

Qsep offers highly reproducible sizing, with a CV of just 0.63%/0%/0.21%/0.15% across 50 runs of a 76, 190, 307 and 527 bp fragment — proving its precision and stability.



Qsep 100 2.0

Bio-Fragment Analyzer

Weight	16.5 kg
Dimensions	41*30*43 cm
Power Source	100-240V AC
Automated Sampling	1-96 (1-384 Customizable)
Minimum Sample Volume	2 μ L (Micro Vial, C104250) 10 μ L (0.1 mL Tube) 10 μ L (0.2 mL Tube)



Application Type	DNA Qualitative Cartridge Kit					
Cartridge Name	Standard Cartridge (S2)	High Resolution Cartridge (S1)	Fast Cartridge (F3)	High Sensitivity Cartridge (N1)	Kilobase Cartridge (S3)	High Sensitivity Kilobase Cartridge (N3)
Cat. No.	C105101 (1 pc) C105201 (2 pcs) C105801 (8 pcs)	C105102 (1 pc) C105202 (2 pcs) C105802 (8 pcs)	C105103 (1 pc) C105203 (2 pcs) C105803 (8 pcs)	C105105 (1 pc) C105205 (2 pcs)	C105106 (1 pc) C105206 (2 pcs) C105806 (8 pcs)	C105153 (1 pc) C105253 (2 pcs)
Size Range	10-5000 bp	10-5000 bp	10-5000 bp	10-5000 bp	10-60000 bp Detection Range: 10 bp-165 kbp	10-60000 bp Detection Range: 10 bp-165 kbp
L.O.D.	0.1 ng/ μ L* 2 pg/ μ L in water*	0.1 ng/ μ L* 2 pg/ μ L in water*	0.1 ng/ μ L* 2 pg/ μ L in water*	5 pg/ μ L* 1 pg/ μ L in water*	0.1 ng/ μ L* 2 pg/ μ L in water*	20 pg/ μ L* 1 pg/ μ L in water*
Best Resolution**	4-10 bp	1-4 bp	\geq 50 bp	4-10 bp	10-50 bp	10-50 bp
Sample Number (per cartridge)	200 runs	200 runs	300 runs	100 runs	200 runs	100 runs
Guaranteed shelf life	6 months	6 months	4 months	4 months	6 months	4 months

Application Type	DNA Quantitative Cartridge Kit			RNA Cartridge Kit		Protein Cartridge Kit
Cartridge Name	Standard Quantitative Cartridge (S2)	High Resolution Quantitative Cartridge (S1)	High Sensitivity Quantitative Cartridge (N1)	RNA Cartridge (R1)	High Sensitivity RNA Cartridge (NR1)	Protein Cartridge (P2)
Cat. No.	C105201-Q (2 pcs)	C105202-Q (2 pcs)	C105105-Q (1 pc) C105205-Q (2 pcs)	C105110 (1 pc) C105210 (2 pcs) C105810 (8 pcs)	C105111 (1 pc) C105211 (2 pcs)	C105121 (1 pc) C105221 (2 pcs)
Size Range	10-5000 bp	10-1500 bp	10-5000 bp	10-6000 nt	10-6000 nt	11-155 kDa Detection Range: 11 - 660 kDa
L.O.D.	0.1 ng/ μ L* 2 pg/ μ L in water*	0.1 ng/ μ L* 2 pg/ μ L in water*	5 pg/ μ L* 1 pg/ μ L in water*	5 ng/ μ L* 1 ng/ μ L in water*	1 ng/ μ L* 0.2 ng/ μ L in water*	0.5 ng/ μ L (BSA)
Best Resolution**	4-10 bp	1-4 bp	4-10 bp	N/A	N/A	N/A
Sample Number (per cartridge)	200 runs	200 runs	100 runs	100 runs	100 runs	100 runs
Guaranteed shelf life	6 months	6 months	4 months	4 months	4 months	4 months

L.O.D.: 2 pg/ μ L (If diluted in water)

*Determined by the DNA ladder (15-622 DNA size marker: C109200)

**Best Resolution: when the target fragments < 500 bps, it can meet this specification.

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