Sniper DQ Lite Digital PCR System

Fully automated digital PCR solution

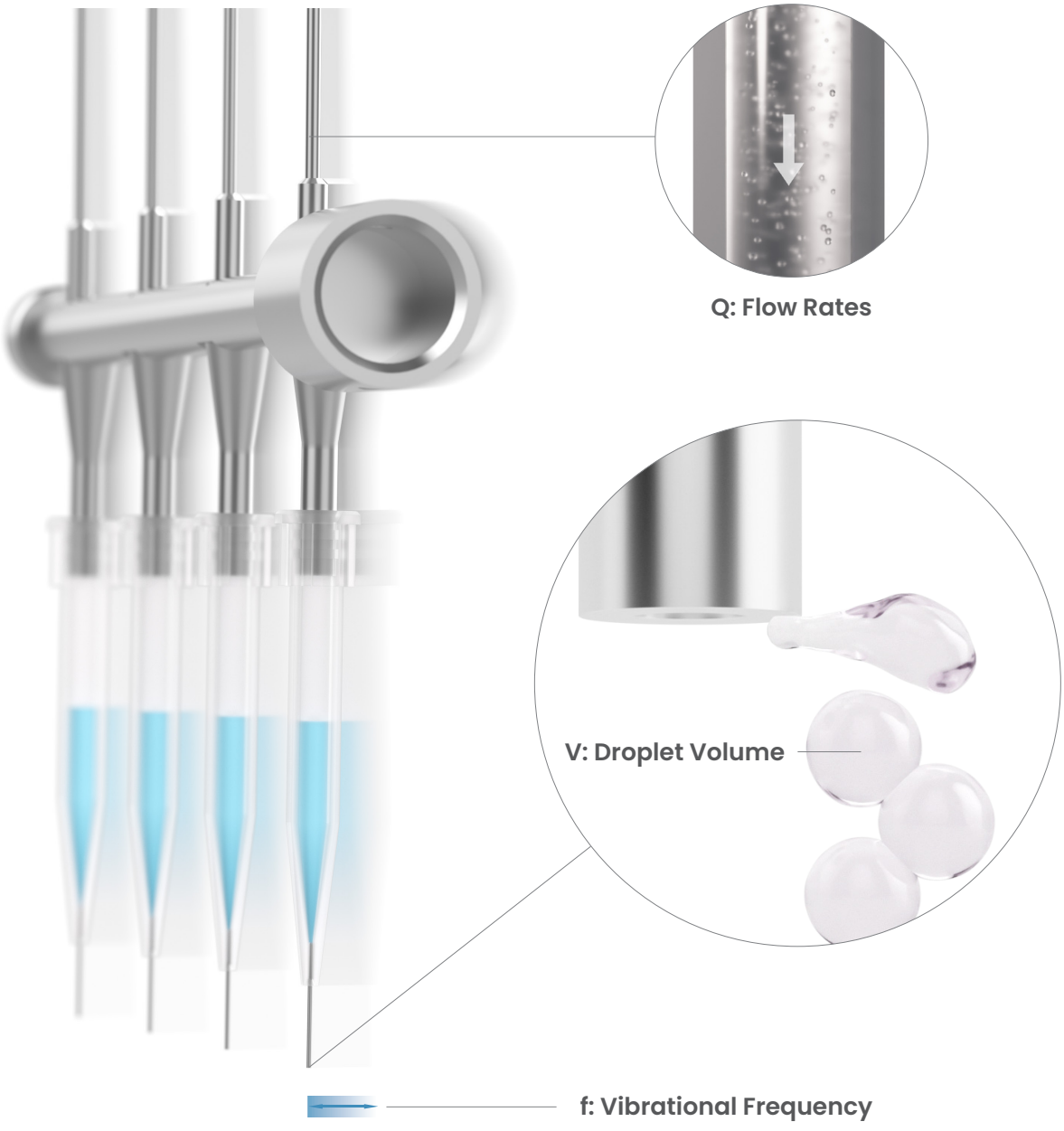
Innovative VibroJect® Technology

Sniper patented VibroJect® technology is a novel droplet generation method enabling droplet generation without reliance on a microfluidic chip.

The VibroJect® technology is an efficient, fast and reliable method for droplet generation. Below the oil surface, the dPCR reaction mixture flows from a microneedle into the oil phase at a constant speed under the control of a sophisticated syringe pump, while the microneedle vibrates reciprocally at a constant frequency. Reaction mixture is steadily split into tens of thousands of droplets of uniform volume and distributed in the oil phase.

VibroJect® $V=Q/2f$

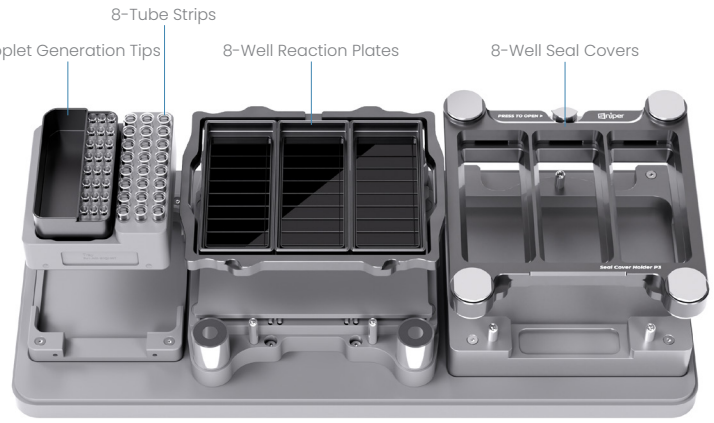
Droplet volume is precise regardless of external conditions.



Work Flow

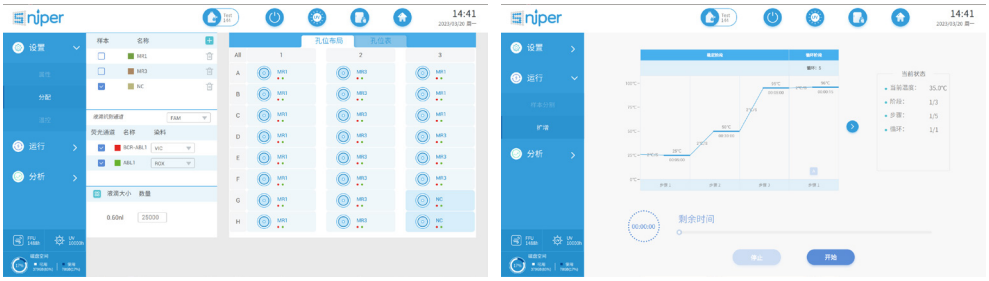
1 Min
Hands-on Time

Manual — Prepare Instrument



Place reaction tubes and consumables into the instrument.

Manual — Program Setting

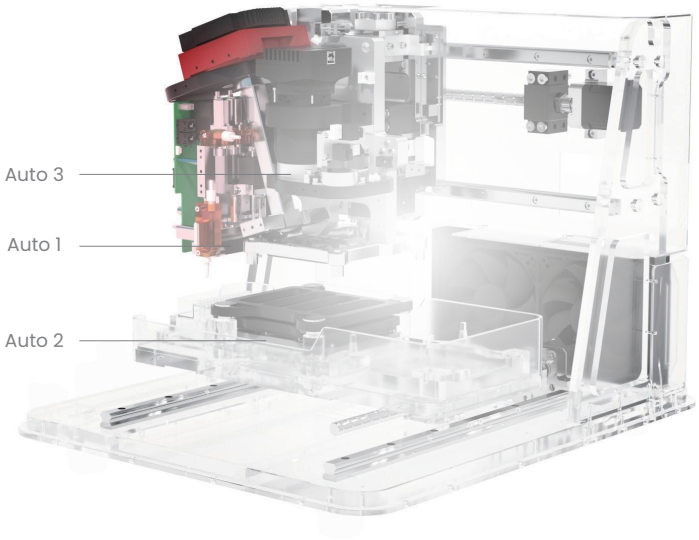


Input sample names, cycling program and detection channels then run!

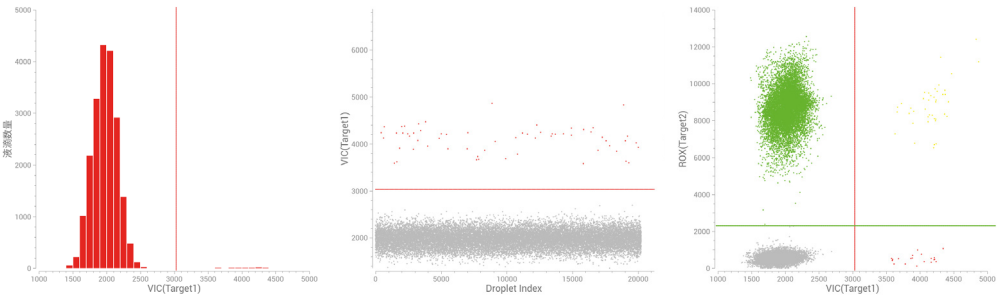
Auto 1 — Droplet Generation

Auto 2 — Cycling

Auto 3 — Imaging



Auto — Data Analysis



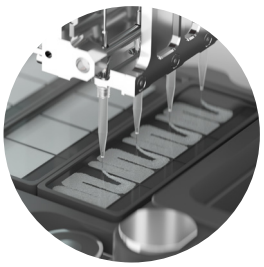
90 Mins
Total Run Time

Features and Benefits

All-in-one Instrument

Minimal hands-on time
Results in 1.5-2 hours
No need for external peripheral equipments

Droplet Generation Module

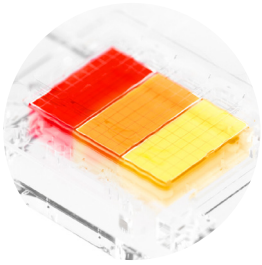


PCR Amplification Module

Flurorescence Detection Module

Easy to Use

8-tube strips
Fully automated



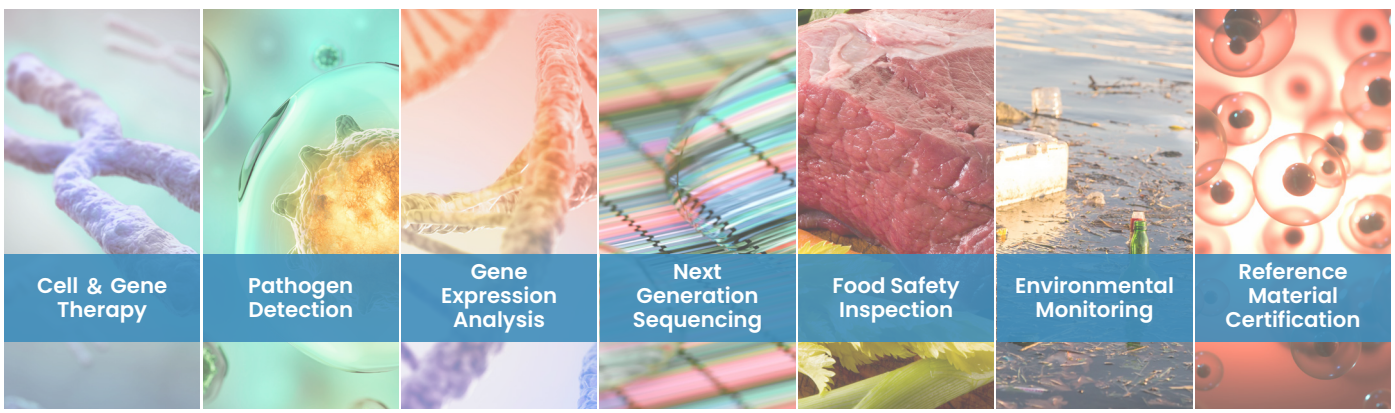
Advanced Temperature Module

Precise temperature control for cycling with gradient option available

3 Channels

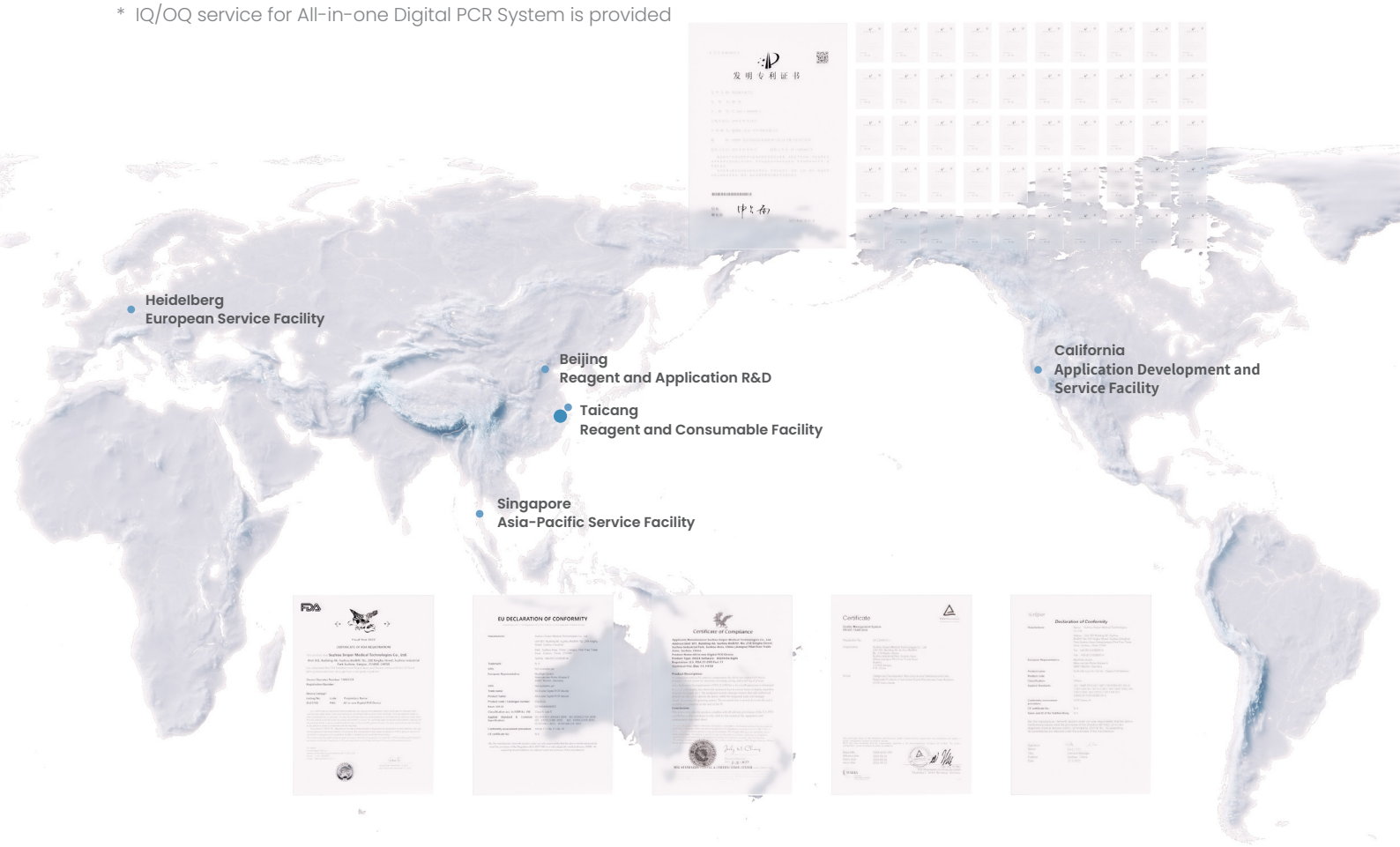
Support digital PCR with dye, probe and one-step method

Applications



In China For Global

* Exclusive patents filed for China, USA, Canada, Europe and Japan
* Sniper has passed the certification of ISO13485:2016-Medical Device-Quality Management System and obtained the certificate
* All-in-one Digital PCR system has entered the Special Review Program for Innovative Medical Devices of National Medical Products Administration (NMPA)
* ALL-in-one Digital PCR System has obtained FDA and CE approvals
* Leukemia Fusion Gene BCR-ABL1 (p210) Nucleic Acid Detection Kit (Digital PCR) received CE and FDA Market Access Qualification
* DQ24-sight software complies with FDA C1.22FR Part 11
* IQ/OQ service for All-in-one Digital PCR System is provided



Ordering Information

Catalog #	Product Name	Note
RM001006A	All-in-one Digital PCR System	DQ Lite

Service

RS001001	IQ/OQ	
RS001002	21 CFR Part 11 V1.0.0	Compliant with FDA 21 CFR Part 11

Universal Reagents

RT002096A	2×dPCR EvaGreen Master Mix (Rox)	Dye Method	96 tests/Pack
RT021096A	2×dPCR Probe Master Mix Plus (Rox)	Probe Method	96 tests/Pack
RT003096A	2×One-step RT-dPCR Probe Super Mix (Rox)	One-step Method	96 tests/Pack
RW007096A	Sniper Digital PCR Consumables Set	DQ Series	96 tests/Pack

Specifications

Dimensions	495mm×500mm×560mm	
Weight	60kg	
Work Conditions	Temperature 15-40℃	Humidity≤80%
Power	100-240VAC, 50/60Hz	
Contamination Control	FFU, UV lamp	

Droplet Generation Method	VibroJect™
User Interface	17.3-inch internal touchscreen
Chemistries	Dye Method; Probe Method; One-step Method
Quality Control	Standalone QC software module that automatically performs quality control on each droplet. Editing functions are available.

Company Introduction

Suzhou Sniper Medical Technologies Co., Ltd., established in 2018, is dedicated to providing rapid, sensitive, accurate, and intelligent molecular diagnostic solutions. The company has developed the VibroJect® technology, a globally patented droplet generation method based on next-generation vibration injection technology. This innovation has pioneered a new, chip-free droplet generation pathway, effectively addressing the high costs and complex operations associated with microfluidic technologies in practical applications. It is poised to revolutionize the field of precision medical testing.

Building upon this technology, Sniper Medical Technologies has introduced the Sniper DQ Series All-in-one Digital PCR System, which only requires sample loading with an 8-tube strip. The system achieves full automation of the entire experimental process without manual intervention. Its single-test consumable costs are significantly lower compared to similar products, facilitating the widespread adoption of digital PCR technology across various application scenarios.

Currently, Sniper Medical Technologies has completed its fourth round of financing, securing hundreds of millions of CNY in capital. The company has established a 6,100 m² research and development center and a 7,900 m² production base, assembling a robust and comprehensive team for instrument and reagent development and production. These efforts provide solutions for life science research, clinical diagnostics, application testing, and the development of new therapies and drugs.

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