

A close-up photograph of a pipette tip dispensing a small, dark purple liquid drop into a well of a microplate. The microplate is white with a grid pattern, and the well is circular. The background is dark and textured.

Fresh thinking
for micro-volume measurement

BioDrop 

Accurate micro-volume results in seconds, for the confidence to do more

Whatever your application — PCR, QPCR, siRNA or DNA microarray — the BioDrop range of instruments deliver rapid, simple and accurate measurement of your DNA, RNA, oligo and protein concentration and purity from just 0.5 μL of sample. BioDrop is flexible when you require it, fast when you need it, and easy to use in every case.



Robust and Sustainable

- Long life Xenon flash lamp
- Low energy usage and screen saver mode
- No moving parts—no need for regular calibrations

Pre-Programmed Methods

- DNA, RNA, oligo and proteins
- Absorbance concentrations AND a comprehensive fluorescent dye menu for those extra important samples
- Method creator for ultimate flexibility
- Additional functionality with the cuvette port option—scanning, multiple wavelengths, kinetics, OD600

Micro-volume Sample Port

- Fixed pathlength—no need for calibration
- Wipe-clean design—no sample cross-over
- Volumes from 1 to 5 μL —even if pipetting is slightly inaccurate, your results won't be

Optimal Performance

- BioDrop instruments are accurate, robust and fast—results in <4 seconds
- Sensitive limit of detection—highly accurate and reproducible results
- Large, high-resolution colour touchscreen for powerful on-board analysis

No Moving Parts

Only BioDrop delivers maintenance-free performance for a lifetime of reliable results



Direct Sampling

BioDrop's unique in-built sample port is dedicated to micro-volume measurement. The port is easy to use: simply pipette as little as 0.5 µL of sample and measure.

Cleaning the port is easy too. Just wipe with lint-free tissue to reduce sample carryover to undetectable amounts.

The in-built sample port uses no moving parts. This means that the instrument provides excellent reproducibility without the need to recondition or calibrate. Measurements are also highly accurate because the pathlength of the port is highly specified to +/- 5 µm.

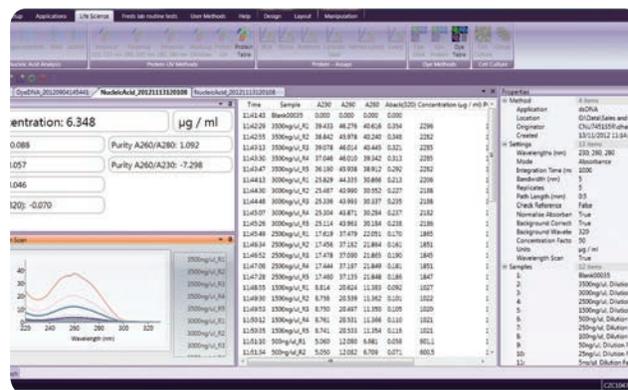
Micro-Volume Specifications of the BioDrop In-Built Sample Port

Pathlength (mm)	0.5
Pathlength Accuracy (µm)	+/- 5
Minimum Volume (µL)	0.5
Maximum Concentration dsDNA (ng/µL)	2,500
Detection Limit (ng/µL)	1

Intelligent Software, Power Analysis

BioDrop instruments feature easy-to-use on-board software via a large, high resolution colour touchscreen. Pre-programmed applications in both on-board and PC software make it quick and easy to set up, choose methods and measure samples.

The powerful BioDrop Resolution Life Science PC Software package is included with all instruments. Data can be transferred from the instrument using a USB flash drive. Alternatively, the instrument can be operated using a PC via a USB connection. A built-in printer can be selected for a complete standalone solution within a small footprint.



- BioDrop Resolution Life Science PC Software offers computer control, pre-programmed applications and powerful custom analysis.
- When compliance is critical, a full 21 CFR Part 11 compliant version is available.

Typical Applications

Application	Typical Concentration	BioDrop DUO+	BioDrop µLITE+
Sequencing	125 ng/20 µl (6 ng/µl)		
Next Generation Sequencing	10 ng/µl		
Transfections	5 to 30 µg/100µl 50 to 500 ng/µl		
DNA Vaccines	0.5 to 2 mg		
PCR	2 ng/µl		
qPCR	200 ng/100 µl (2 ng/µl)		
DNA Microarray	>2 µg		
siRNA	7.5 µg/µl		
Protein Crystallography	50 ng/µl		

Ordering Information

Order #	Product	Description
80-3006-68	BioDrop DUO+	Spectrophotometer with 10 mm cuvette holder and 0.5 mm micro-volume port
80-3006-69	BioDrop DUO+ with built-in printer	Spectrophotometer with 10 mm cuvette holder and 0.5 mm micro-volume port and built-in printer
80-3006-55	BioDrop µLITE+	Spectrophotometer with 0.5 mm micro-volume port
80-3006-56	BioDrop µLITE+ with built-in printer	Spectrophotometer with 0.5 mm micro-volume port and built-in printer
80-3006-70	BioDrop Resolution Life Science PC Software	Full 21 CFR Part 11 compliant PC control software

Which BioDrop is Right For You?

PARAMETER	BioDrop Duo+	BioDrop μ Lite+
Display	7" display with capacitive touch panel	
Configuration	Split Beam	
Lamp	Pulsed Xenon lamp with 3 year warranty	
Languages	English, French, German, Spanish, Italian, Japanese, Chinese	
Sample volumes as low as 0.5 μ l	Yes	
Micro-volume sample port with No Moving Parts	Yes	
No sample carryover, Wipe Clean design	Yes	
Nucleic Acid Purity Check with warning	Yes	
Rapid start, no warm-up time	Yes	
Standalone operation with on-board analysis	Yes	
Measurement Time	<4 seconds	
Pathlength	10 mm cuvette port (Z=15 mm); 0.5 mm micro-volume sample port	0.5 mm micro-volume sample port
Wavelength Range	190 nm to 1100 nm	
Wavelength Accuracy	± 2 nm	
Wavelength Reproducibility	± 1 nm	
Spectral Bandwidth	5 nm	
Stray Light	<0.5%T @ 220 nm NaI, <0.5%T @ 340 nm NaNO ₂	
Photometric Range	-0.3A to 2.5A, 0 to 199%T	
Photometric Accuracy	$\pm 0.01A + 1.5%$ of the reading @ 546 nm	
Photometric Reproducibility	$\pm 0.003A$ (0 to 0.5A), $\pm 0.007A$ (0.5 to 1.0A)	
Noise	0.005A peak to peak, 0.002A RMS	
Power Input	120 to 240V~ 50/60Hz, 40VA Max	
Dimensions	Height 190 mm x Width 280 mm x Depth 410 mm (521 mm with printer)	
Weight	Approx. 3.55 kg (4 kg with printer)	
Software	Resolution Software (included)	
Life Science Applications	DNA, RNA, Oligo, Fluorescent Dye, Tm Calculation, Protein Dye, Protein UV and Colorimetric protein methods	
Applications	Single Wavelength, Concentration, Wavescan, Kinetics, Standard Curve, Substrate, Equation Editor	



Accurate micro-volume results in seconds.

What can you do with a Drop?

Distributors:

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Download the BioDrop Application Note and locate your local sales representative at <https://www.biodrop.co.uk>



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