

BioDrop DUO

Boost your micro-volume application capability



BioDrop DUO is the ideal solution for life scientists for whom flexibility of measurement is a key requirement.



Product Overview

BioDrop DUO UV/Vis spectrophotometer has two measurement modes: a unique in-built sample port unrivalled dsDNA detection limit of 1ng/μl PLUS a cuvette holder for the revolutionary BioDrop CUVETTE 125, ideal for highly concentrated samples.

BioDrop DUO is quick and easy to use. It has a large capacitive colour touch screen with on-board software for data acquisition and analysis. Pre-programmed methods for DNA, RNA, oligos and proteins in the on-board software reduce the time from measurement to results. In addition, data generated using the on-board software can be stored internally or transferred using a USB memory stick. Alternatively, both the PC-only and standalone instruments can be controlled using a PC and BioDrop Resolution Software. Users can also choose an optional built-in thermal printer for maximum flexibility.

BioDrop DUO has an in-built sample port with no moving parts. Because the pathlength doesn't move, the instrument provides excellent reproducibility. Measurements are also highly accurate because the pathlength is specified to +/- 5μm.

dsDNA Measurement	Pathlength	Minimum Volume	Detection Limit	Maximum Concentration
BioDrop in-built sample port	0.5mm	0.5μL	1ng/μL	2,500ng/μL
BioDrop CUVETTE 125	0.125mm	0.6μL	7ng/μL	10,000ng/μL

All in one flexibility!

- **Never have to calibrate** The in-built sample port uses no moving parts providing outstanding measurement performance
- **Two ways to measure** micro-volume samples: in-built sample port for micro-volume measurements and a cuvette holder
- **Extended capability** for micro-volume measurement with the BioDrop CUVETTE 125 for highly concentrated samples
- **Fast operation** – switch on and measure a DNA sample in <4 seconds with only 4 screen touches
- Large, high-resolution, capacitive **colour touchscreen** on standalone instrument
- The in-built sample port is **easy to clean** and maintain
- **USB** connectivity for easy PC connection or data export
- BioDrop Resolution Life Science **PC software** for powerful analysis

BioDrop Resolution Life Science PC Software

- Dedicated life science methods for determining the concentration and purity of DNA, RNA, oligos and protein as well as the ability to create and save customized methods
- Fast and easy to use with intuitive modules for quick measurements, wavelength scanning, quantitation and kinetics
- Pre-programmed with BioDrop pathlengths for quick calculations
- Optional BioDrop Resolution CFR module for laboratories requiring full 21 CFR part 11 compliance

Fresh thinking for micro-volume measurement



Technical Details

	BioDrop DUO	BioDrop DUO PC
Display	5.7" colour capacitive touchscreen	None
Light Source	Pulsed Xenon lamp with 3 year warranty	
Detector	1024 element CCD array	
Wavelength Range	190 – 1100nm	
Minimum Volume (dsDNA of in-built sample port)	0.5µL	
Maximum Concentration of in-built sample port (dsDNA)	2,500ng/µL	
Detection Limit of in-built sample port (dsDNA)	1ng/µL	
Pathlength Accuracy of in-built sample port	+/- 5µm	
Wavelength Accuracy	± 2nm	
Wavelength Reproducibility	± 1nm	
Spectral Bandwidth	5nm	
Stray Light	<0.5%T at 220 nm and 340 nm using NaNO ₂	
Absorbance Range	- 0.3A to 2.5A (-0.3A to 50A: 10 mm equivalent)	
Absorbance Accuracy	±0.005A or 1% of the reading, whichever is the greater at 546 nm	
Absorbance Reproducibility	±0.003A (0 to 0.5A), ±0.007A (0.5 – 1.0A)	
Noise	0.005A peak to peak 0.002A RMS	
Output	USB port for USB memory stick	USB port for PC connection
Power input	90-250V, 50/60Hz, Max 50VA	
Dimensions	420 x 260 x 185mm	
Weight	approx. 3 kg	
Life Science PC Software	DNA, RNA, oligo, direct UV and colorimetric protein methods, dye labelling efficiency, T _m calculation	
Software Languages	English, Simplified Chinese, French, German, Spanish	English

Ordering Information

Part number	Description
80-3006-61	BioDrop DUO
80-3006-61-125	BioDrop DUO plus BioDrop CUVETTE 125
80-3006-62	BioDrop DUO with built-in printer
80-3006-62-125	BioDrop DUO with built-in printer plus BioDrop CUVETTE 125
80-3006-60	BioDrop DUO PC
80-3006-60-125	BioDrop DUO PC plus BioDrop CUVETTE 125
80-3006-70	BioDrop Resolution CFR PC Software



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