

The Xdrop instrument

Xdrop supports high-resolution analyses of cells and genomes. It uses microfluidics-based technology to encapsulate living mammalian or microbial cells, organelles, long DNA fragments, or other biological material in double- or single-emulsion droplets.



Figure 1. Xdrop instrument - front and back panel.

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|---|------------------|---|
| ① | Touchscreen | - to interface the instrument's software |
| ② | Power Button | - to activate instrument |
| ③ | LED Indicators | - indicates instrument activity status |
| ④ | Cartridge Drawer | - to load cartridges |
| ⑤ | USB Port | - for software update and data collection |
| ⑥ | Exhaust Fan | - to cool down instrument |
| ⑦ | Product Sticker | - contains instrument serial number |
| ⑧ | Power Connector | - to connect power cord |
| ⑨ | On/Off Switch | - to turn the instrument on and off |

Intended use

The Xdrop platform is a microfluidic droplet system that enables high-throughput single-cell analysis and genomic applications. The instrument encapsulates cells, DNA, or particles into individual double-emulsion droplets, enabling subsequent analysis and sorting on flow cytometers. The instrument may be used with a variety of sample types, including microbial cells, mammalian cells and DNA samples.

The Xdrop platform is intended for use by trained laboratory personnel in a clean laboratory environment.

Components included in shipping box

Name	Item no.	Quantity	Notes
Xdrop Instrument	IN00110-EU	1 instrument	
Power Cable		1 power cable	Country-specific power cable
USB Flash Drive		1 USB key	Containing operating software

Instrument specifications

Technical specifications

Model	Xdrop model II
Dimensions (w x h x d)	30.5 x 36.4 x 65.4 cm 12.0 x 14.3 x 25.7 in
Weight	23.5 kg / 51.8 lbs.
USB port	1x USB 2.0 port (for data transfer only)
Monitor	15.6" LCD touchscreen

Operating specifications

Input voltage	110–240 V, 50/60 Hz
Max current	at 230 VAC: 650 mA at 115 VAC: 1.3 A
Operating temperature	20 – 25°C
Max operating altitude	2000 m
Relative humidity (RH)	0 – 75%.

Regulatory compliance

Overvoltage category	Class II
Pollution degree of environment	2
Degree of ingress protection (IEC 60529)	IP20, Type 1 (UL50E)
Electromagnetic compatibility (EMC)	IEC 61326-1
Certificates	CE, UL, FCC Class A