



Rheolution
TEST SMARTER

ABSOR.B™

Specs and Features



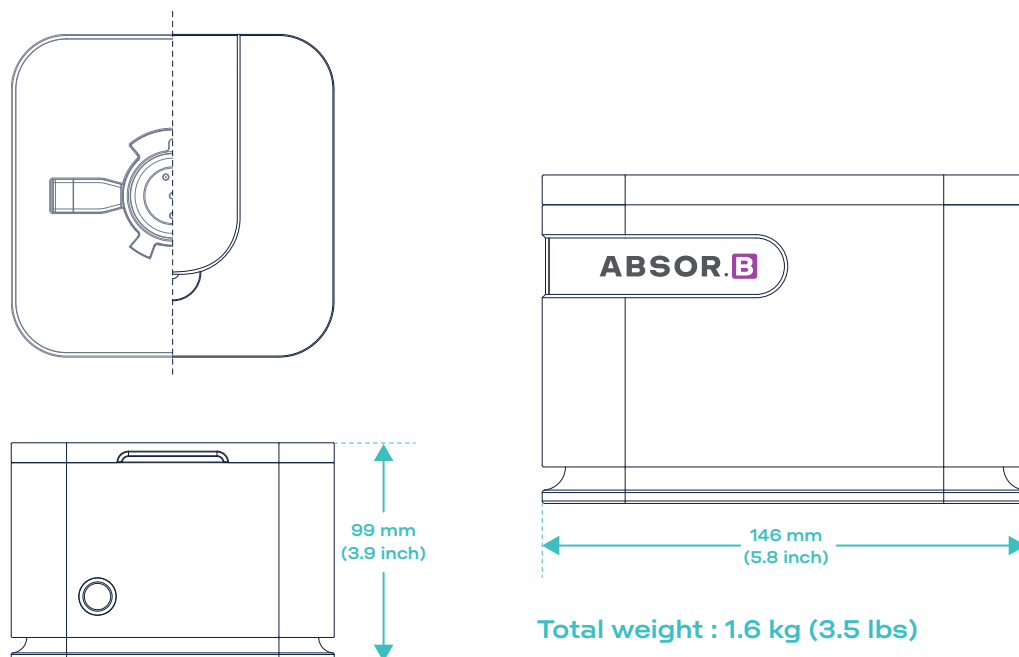
ABSOR.B™

The only IoT, Modular & Data-Driven Absorbance & Transmittance Meter on the Market.

ABSOR.B™ is part of the CASCAD.S™ series of optical instruments. Operating as a discrete spectrophotometer, it represents the latest advancement in absorbance and transmittance measurements in liquid materials. The ABSOR.B™ is a fully customizable, scalable, actionable, and data-driven instrument. By using interchangeable cartridges operating at different wavelengths, this device enables easy and precise measurement of absorbance and transmittance at various scales.

User can build and augment ABSOR.B™ discrete spectrophotometer as needed, when needed. Wavelength-specific optical cartridges can be plugged and operated in the ABSOR.B™ at any time in order to fulfil existing applications or new projects:

- Choose the appropriate optical emitting or receiving cartridge with the wavelength that suits the needs of your particular application.
- Simply plug and use interchangeable emission and reception optical cartridges with specific wavelengths.
- Order new optical cartridges (wavelengths) as your applications and projects evolve over time.
- Use the sample holder that best suits your needs: 10 mL, 4 mL, or 1 mL vials, cuvette, or PCR-tube.
- Operate the ABSOR.B™ under a flow hood by leveraging the communication capabilities of the wireless operating tablet.
- Benefit from the outstanding data acquisition and processing capabilities of the Soft Matter Analytics App.
- Experience effortless scalability and maximum flexibility with the advanced modularity of ABSOR.B™.
- Whether your testing needs evolve or new applications emerge, you can add new units to your system at any time.
- Simply pair new ABSOR.B™ units with your existing system and control up to five instruments from a single tablet with the Soft Matter Analytics App.
- With each ABSOR.B™ unit able to operate independently and with a different set of cartridges, you can tailor your system to precisely meet your needs.



Dimensions of a single ABSOR.B™ unit

Specification sheet of ABSOR.B™

Measurement range	0-5 OD
Photometric resolution	0.001 OD
Reproducibility	<0.8% at 2 OD
Linearity	≤ 0.8% from 0.0 to 2.0 OD
Light Source / Light Detector	Laser / Si PhotoDiode
Emission cartridges	850 nm ± 5 nm (bandwidth < 3 nm), 635 nm ± 5 nm (bandwidth < 3 nm), 520 nm ± 1 nm (bandwidth < 3 nm) and 405 nm ± 10 nm (bandwidth < 3 nm) (cartridges are interchangeable)
Compatible with multiple sample holders	1, 4 or 10 mL vials, 10 mL Cuvette, 200 µL PCR-Tubes
Measuring modes	Kinetics over time or single point measurement
Custom time steps between measurements	17 seconds to 60 minutes
Custom total measurement time	10 seconds to 240 hours
Environment	15°C to 30°C; max 95% RH non-condensing
Power Supply	100-240 VAC (±10%), 50 – 60 Hz, 1.5 A max
Dimensions	146 x 146 x 94 mm (W x D x H)
Weight	1.6 Kg
10.5" Windows tablet with protective cover	245 mm x 175 mm x 8 mm
Operating software	Soft Matter Analytics™ software