

## bportable – affordable benchtop kinetics

bportable offers an efficient and affordable solution to measure biomolecular interactions without labels and in real-time. With its small footprint, it is designed to perform kinetic measurements in every benchtop environment. Its reliable workflow includes automated online immobilisation, automated sample handling and in-line referencing. With the bportable you gain fast access to information on binding affinities as well as association and dissociation rates ( $k_a$  and  $k_d$ ). This allows you to make informed decisions quicker and move projects along faster.

### High data quality affordable for everybody

bportable features the proprietary SCORE technology (single colour reflectometry) which guarantees a reproducible measurement signal and low baseline drift. With its precise optics and microfluidics, binding events are observed in a stable environment in real-time. Therefore, kinetic rate constants can be determined with high accuracy for a wide range of molecules.

The smart and compact design makes the bportable affordable and keeps maintenance costs minimal.

### Consumables

bportable utilises low-cost glass type consumables. The chips are optimised for fast and reliable online immobilisation of biomolecules in the bportable system. Biametrics sensor chips come equipped with various coupling chemistries.

### Ideal for

- Quality control
- Process control
- Training courses
- Fast & easy measurements

### Fast setup & easy handling

bportable is designed to be easily put into almost any measurement environment with very short setup time. User interfaces for samples and reagents are optimised and enable experiments for personnel with minimal training. Sample loading and incubation is automatised to reduce handling errors.

The small footprint and weight of bportable also allow easy storage and transport of the device between laboratories.

### Applications

Application fields for the b-portable include:

- Kinetic characterisation
- Calibration-free concentration analysis
- Immunoassay development
- QC and Bioprocessing

bportable is also ideal for fast process control in production facilities or student training courses.

Do you have further applications in mind?  
Contact us to discuss your needs with our specialists.



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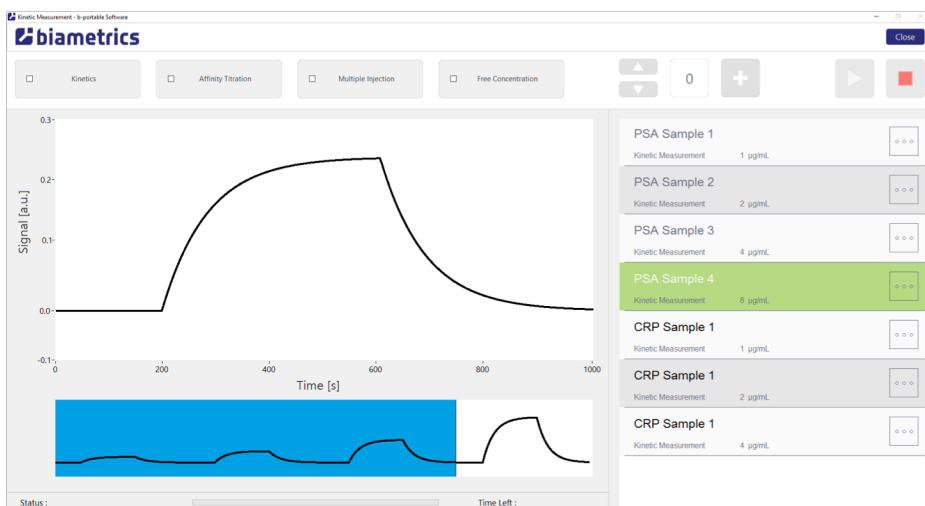
## Software

The bportable software is optimised for touch-screen devices to ensure easy handling and fast setup of the system. It includes a measurement and a data evaluation package.

Measurement, online immobilisation, sample handling and data acquisition are automatised within an user friendly interface. In addition to fast single measurements you can use pre-programmed protocols for performing:

- Online immobilisation
- Kinetics
- Calibration-free concentration analysis
- Affinity in homogeneous phase
- Sandwich assays
- Binding inhibition
- Multiple sequential injections

The open data format also allows the export of data for further evaluation with third party applications.



## bportable software:

Binding can be followed in real-time in the measurement screen of the bportable software.

A number of pre-programmed protocols are available for standard measurement routines.

**Sensitivity & detection limits** 1 pg/mm<sup>2</sup>

## Kinetics

Association rate constants ( $k_a$ ): between 10<sup>3</sup> and 10<sup>7</sup> M<sup>-1</sup>s<sup>-1</sup>  
 Dissociation rate constants ( $k_d$ ): between 10<sup>-6</sup> to 0,5 s<sup>-1</sup>

## Analyte types

Peptides, proteins, DNA, RNA, polysaccharides, lipids, small molecules, cells, viruses and nanoparticles

## Sample matrices

Various matrices, e.g. DMSO-containing buffers, cell culture media, urine, plasma, serum, whole blood

## Data acquisition

Min. 1 Hz with in-line reference subtraction

## Automation

Integrated fluidics for incubation and online immobilisation, unattended measurement cycles with up to 4 samples/reagents (unlimited number of cycles with user input possible)

## Portability

Size 20 cm x 20 cm x 20 cm  
 Weight 3,75 kg

## Contact

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