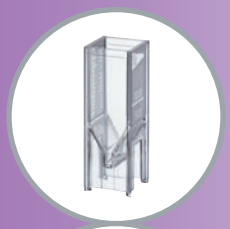


BioPhotometer plus analysis system

The Plus for your lab!

The easy, rapid and reliable BioPhotometer plus analysis system

eppendorf

See it clearly!

UVette®

Precision in plastics
The patented*[1] UVette is the first commercially available fully UV-transparent disposable cuvette—and a perfect example of Eppendorf's expertise in precision optical parts production.

● Pure
– Clean room production
– Optional individually packaged
– Lot specific certificates available
– Recovery of samples without the risk of degradation or contamination

● Convenient
– Small sample volume ≥50 µl
– Frosted grip for labeling
– No cleaning necessary (disposable cuvette)

● Precise
– UV- and VIS-transparent between 220 nm and 1,600 nm
– Tapered cuvette base for accurate filling

● Flexible
– Two optical path lengths (2 mm and 10 mm)
– Adapters for use with other spectrometers available

Applications
- Measurements of precious samples, e.g., RNA applications
- Quantification of low concentrations
- Recovery of samples for downstream applications

UVette® routine pack

● Simple
– Convenient access to each cuvette
– Easy filling of multiple cuvettes
– Perfect for routine applications

Applications
- Protein quantification using 280 nm
- Measurement of small sample volumes (≥50 µl)
- Cell density (OD_{600}) measurement

● Useful information about material compatibility, certificates, or application notes on the Eppendorf UVette are available at **www.eppendorf.com/uvette**

*[1] US-Patent 6249345.

Focus on the small things!

Hellma® TrayCell*2

Small volume, great results
Hellma is a leading manufacturer of high precision optical products. The Hellma TrayCell, along with our BioPhotometer, allows a highly reproducible photometric analysis in the microliter scale. Filling, measurement and cleaning is done in just a few seconds. If required, samples can even be completely recovered for further usage.

● Reproducible
– No cross contamination due to easy cleaning
– No error-prone dilutions needed
– Wide dynamic range

● Versatile
– Suitable for all routine applications
– Works with 0.7 µl to 5 µl sample volume
– Suitable for a wavelength range from 190 nm to 1,100 nm

● Compatible
– Fibre optic microliter cell
– Equivalent size to standard cuvette
– Optimized for use in Eppendorf BioPhotometer

Applications

- Nucleic acid analysis, protein quantification and other applications with small sample volumes
- Quantification of high concentrated samples

● The optical light path is defined by the gap between cap and the surface of the optical window on which the sample is directly applied.

*2 This product is sold by Hellma GmbH & Co. KG.
Ordering Information:

Hellma TrayCell, 68.5 mm, 8.5 mm, (incl. 0.2 mm and 1 mm cap)	105.800-UVS Z 8,5 mm
Cap for TrayCell, light path 1.0 mm	665.703
Cap for TrayCell, light path 0.2 mm	665.704
Cap for TrayCell, light path 0.1 mm	665.706
Cap for TrayCell, light path 2.0 mm	665.705

For detailled technical information please visit **www.hellma-worldwide.com**

Please press here!

BioPhotometer plus

An advantage for your lab!
The BioPhotometer plus is a compact UV/VIS photometer for flexible applications in molecular biology, biochemistry or cell biology. Routine work is done reliably and the results are calculated at a glance and adapted to your needs.

Flexible
– 9 wavelengths for 32 methods (9 freely programmable)
– Optimized for small sample volumes using microliter cells

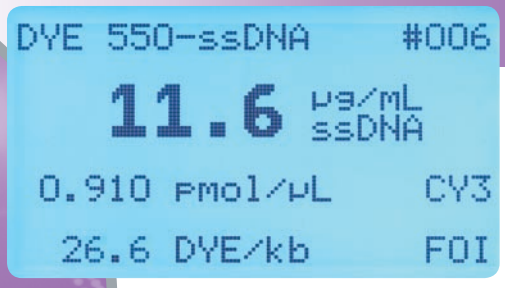
Small
– Space saving device
– High stability
– Easy to transport

Reliable
– Calculation of all results, factoring in dilutions
– Storage of the last 100 results

Fast
– Precise results without pre-warming of the instrument
– Quick measurement of single wavelengths

Methods

- **Nucleic acids:** dsDNA, ssDNA, RNA, Oligo
- **Protein:** 280 nm, Bradford, Lowry, BCA
- **Cell density:** OD_{600}
- **Dye 550/650:** Frequency of incorporation of fluorescent dyes (e.g., Cy3, Cy5)
- **Assays:** endpoint measurements at 340 nm, 405nm, 490 nm, e.g., enzymatic activities and cell biological methods
- **Absorption:** direct measurement of single wavelengths without further processing



● User manual, application notes and many useful tips can be found at **www.eppendorf.com/detection**

Expand your prospects!

BioPhotometer Data Transfer Software

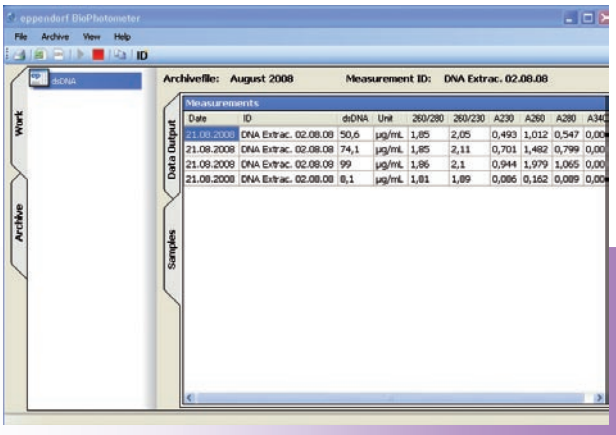
Effortless Data Storage
The BioPhotometer Data Transfer Software transfers all measurement and calibration data to a PC. This allows you to archive the measurements and to export the results easily into a data processing software.

● **Easy**
– User-friendly operation
– Clearly arranged data
– Data export

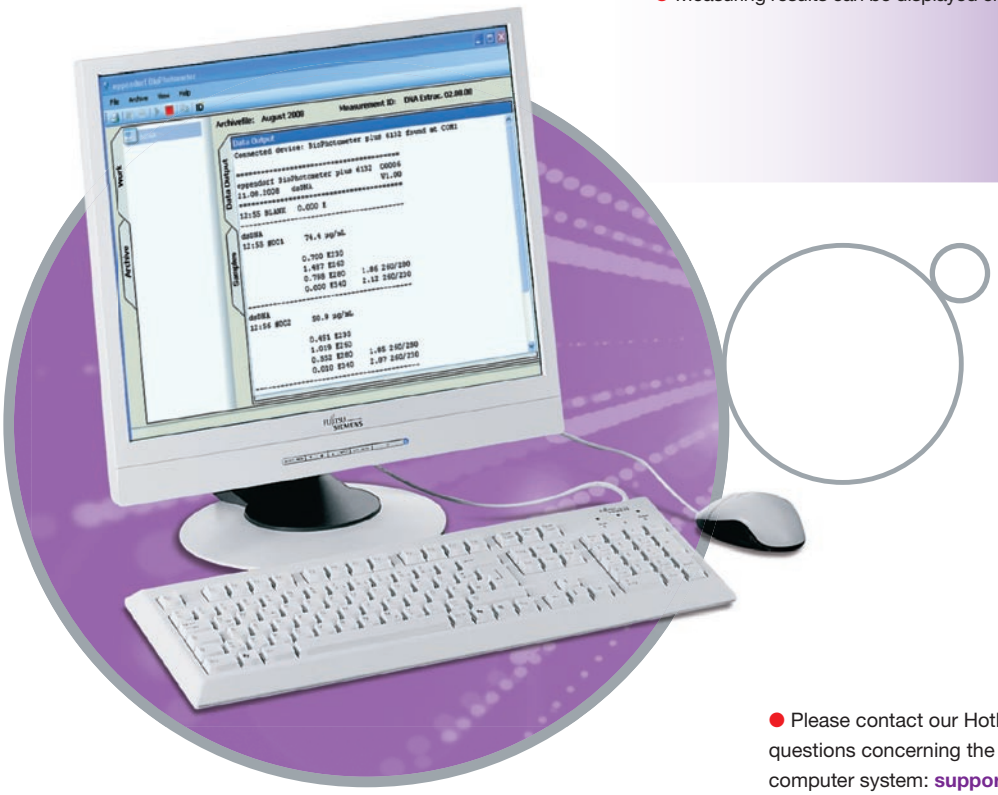
● **Save**
– Long-term data storage
– User administration (optional)
– Transmission of all measurement and calibration data

Applications

- Data transfer for further data processing
- Long term storage of measurement results



● Measuring results can be displayed either in tabular or display view.



● Please contact our Hotline if you have any questions concerning the compatibility with your computer system: **support@eppendorf.com**

BioPhotometer plus

Technical Specifications

Optical system:	Absorption single-beam photometer with reference beam
Light source:	Xenon flash lamp
Light beam height:	8.5 mm
Measuring wavelengths:	230, 260, 280, 340, 405, 490, 550, 595, 650 nm
Spectral bandwidth:	5 nm at 230–340 nm, 7 nm at 405–650 nm
Wavelength systematic error:	±1 nm at 230–280 nm, ±2 nm at 340–650 nm
Photometric measuring range:	0 to 3 A (2 A at 340 nm); Dye Methods: 2 A at 550 nm/650 nm
Photometric random error:	±0.002 A at 0 A; ±0.005 A at 1 A
Photometric systematic error:	±1% at 1 A
Method-dependent calculation:	Absorbance, Concentration via factor, Concentration via calibration with 1 to 10 standards, One-point calibration (1 standard), Linear regression (2 to 10 standards), Non-linear regression (3rd degree polynom; 4 or 5 to 10 standards), 1×, 2× or 3× determination, Ratio 260/280, ratio 260/230, molar concentration, total yield, Ratio 260/280, ratio 260/230, molar concentration, total yield, For dye methods: FOI (frequency of incorporation)
Calibration memory:	For all calibration procedures
Results memory:	For 100 results with absorbance and ratio values, sample number, sample dilution, date and time
Interface:	RS-232 C, serial, PC connection optional
Power requirement:	Approx. 20 W in operation, approx. 10 W in Standby mode
Power supply:	100–240 V, ±10 %; 50–60 Hz, ±5 %
Dimensions (W × D × H):	20 × 32 × 10 cm
Weight:	3 kg
Accessories:	Thermal printer DPU 414, 40 characters/line; Secondary UV-VIS filter set for verifying photometric and wavelength accuracy (NIST traceable)
Cuvettes:	UVette, Hellma TrayCell*, and common rectangular cuvettes of suitable glass or plastic materials

Technical specifications subject to change.
* For further information on the Hellma® TrayCell, please visit **www.hellma-worldwide.com** or contact your local Eppendorf representative.

Ordering information

Description	International Order no.	North America Order no.
BioPhotometer plus	6132 000.008	952000006
Secondary UV-VIS filter test set for verifying photometric precision and wavelength accuracy (NIST traceable)	6131 928.007	952010221
Thermal printer DPU 414, incl. power supply 230 V and printer cable	6131 011.006	952010140
Thermal paper (5 rolls)	0013 021.566	952010409
UVette®, individually packaged single cuvettes, Lot specific certificates available, 80 pcs.	0030 106.300	952010051
UVette routine pack, Eppendorf Quality purity level, reclosable box, 200 pcs.	0030 106.318	952010069
BioPhotometer Data Transfer Software	6132 854.007	952000500

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In touch with life

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