

# We're on your wavelength

- Instant results at the touch of a single button
- Optimised for microlitre measurements
- 9 wavelengths with 32 routine methods
- Reliable, fast & flexible



## Eppendorf BioPhotometer Plus Nano

### BioPhotometer Plus & Hellma® TrayCell

#### We're on your wavelength

Eppendorf understands your need for a fast, reliable and cost effective UV-VIS photometer to deliver reproducible photometric analysis in microlitre scale. The BioPhotometer Plus Nano combines the flexibility and functionality of the trusted BioPhotometer Plus with the optical precision of Hellma® fibre optic TrayCell to deliver a nano photometer in a cost effective package.

Simply contact your local Lomb Account Executive or Customer Service Representative today, to arrange a FREE demonstration of the BioPhotometer Plus Nano in your laboratory.

#### BioPhotometer Plus Nano features:

- Reproducible results with less than 1µl
- Measurements & calculations performed in seconds
- Accurate results without the need for dilutions
- TrayCell caps eliminate sample evaporation
- Complete recovery of samples
- No PC connection required

# Flexible Fast Reliable



## Eppendorf BioPhotometer Plus

The BioPhotometer plus is a compact UV/VIS photometer that provides instant and reliable results for 32 routine methods in just a few seconds. If precision, speed and flexibility are required then the BioPhotometer Plus is the perfect partner for your laboratory.

- **Flexible**
  - 9 wavelengths for 32 methods
  - Optimised for small sample volumes
- **Compact**
  - No PC connection necessary
  - Space saving footprint
- **Reliable**
  - Calculation of all results, factoring in dilutions
  - Storage of the last 100 results
  - No pre-warming of unit required

## Hellma® TrayCell

Hellma® is a leading manufacturer of high precision optical products. The fibre optic Hellma® TrayCell, together with the Eppendorf BioPhotometer, allows a highly reproducible photometric analysis in the microlitre 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 required
- **Versatile**
  - Suitable for all routine applications
  - Works with 0.7µl to 5µl sample volume
  - Suitable for a wavelength range from 190nm to 1,100nm



# BioPhotometer Plus Nano

## Methods

Nucleic Acids	dsDNA, ssDNA, RNA, Oligo
Proteins	Bradford, Lowry, BCA
Fluorescents	Dye 550/650
Cell Density	OD 600
Assays	Endpoint measurements at 340nm, 405nm & 490nm
Absorption	Single wavelength measurements

## 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:	5nm at 230–340nm, 7nm at 405–650nm
Wavelength systematic error:	±1nm at 230–280nm, ±2nm at 340–650nm
Photometric measuring range:	0 to 3A (2A at 340nm); Dye Methods: 2A at 550nm/650nm
Photometric random error:	±0.002A at 0A; ±0.005A at 1A
Photometric systematic error:	±1% at 1A
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) Nonlinear regression (3rd degree polynomial; 4 or 5 to 10 standards), 1×, 2× or 3× determination 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:	RS232C, 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

## Order Information

Code	Description	Unit
613200024-NANO	BioPhotometer Plus Nano includes: 1x Eppendorf Biophotometer Plus 1x Hellma® Micro Volume TrayCell with 1mm Cap (105.810-UVS) 1x Hellma® 0.2mm Cap (665.704)	Set

## Optional Accessories

Code	Description	Unit
6131928007	Secondary UV-VIS filter test set for calibration (NIST traceable)	Each
6131011006	Thermal printer DPU 414, incl. power supply and printer cable	Each
0013021566	Thermal paper	Pack/5
0030106300	UVette®, individually packaged single cuvettes	Pack/80
0030106318	UVette routine pack, Epp Quality purity level, reclosable box	Pack/200
6132854007	BioPhotometer Data Transfer Software	Each

