

The NanoPhotometer™



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One spectrophotometer for all your needs

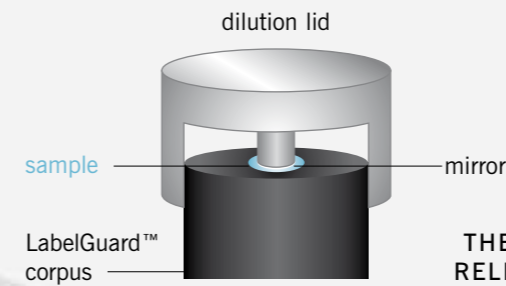
All kinds of UV/Vis photometric applications in molecular biology, biochemistry and microbiology featuring

- ultra low sample volume: starting from 0.7 μ l
- measurements without cuvettes plus standard cuvette option

- predefined methods for protein and nucleic acid measurements
- full spectrum scan and kinetic methods
- full developed software on-board and direct data download to PC
- high reproducibility

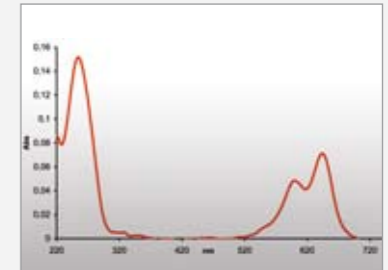


VOLUME
3,500 μ l
200 μ l
100 μ l
0.7 μ l



THE ONLY TECHNOLOGY FOR RELIABLE PROTEIN ANALYSIS

No evaporation, volatile solvents possible.



WAVELENGTH
1,100 nm
190 nm

SMALL & FAST

Print data via built-in printer, store data via USB or Bluetooth on your PC

READY TO USE

Low bench space requirement, computer independent. Built-in computer with backlit LCD display for fast and easy data access

ALL IN ONE

Multi purpose sample holder for sub-microliter, standard cuvette and fiber optic applications

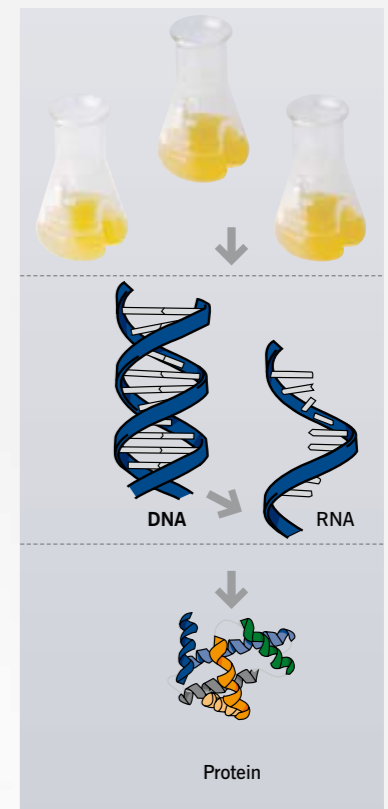
ULTRA LOW VOLUME, NO SAMPLE DILUTION

LabelGuard™ microliter cell device for sub-microliter measurements included within the system



EASY TO CONTROL

Rugged key pad for fast method selection and easy data entry



CELL DENSITY
 8×10^8 cells/ml
1 cells/ml
NUCLEIC ACIDS
8,000 ng/ μ l
2 ng/ μ l
approx. 160 mg/ml
PROTEIN (BSA)
0.1 mg/ml

Technical Specifications

| | |
|----------------------------------|--|
| Wavelength range | 190 – 1,100 nm |
| Wavelength scan range | 200 – 950 nm |
| Measure time for full scan range | Less than 5 seconds |
| Wavelength reproducibility | < ± 0.2 nm |
| Wavelength accuracy | ± 2 nm |
| Bandwidth | Better than 5 nm |
| Stray light | < 0.5% at 220 nm using NaI and 340 nm using NaNO ₂ |
| Photometric range | -0.3 – 2.499 A 0-199% T |
| Detection Range | dsDNA: 2 ng/ μ l to 8,000 ng/ μ l, BSA: 0.1 mg/ml to saturation, approx. 160 mg/ml |
| Photometric reproducibility | ± 0.003 A (0 to 0.5 A) ± 0.007 A (0.5-1.0 A) @ 260 nm |
| Photometric accuracy | ± 0.005 A or $\pm 1\%$ of the reading, whichever is the greater |
| Zero stability | ± 0.003 A/hour after 20 min warm up @ 340 nm |
| Noise | 0.002 A rms at 0 A @ 260 nm 0.005 A (pk to pk) at 0 A @ 260 nm |
| Optical arrangement | Dual channel Czerny Turner with flat grating, 1024 pixel CCD array, concave mirrors |
| Lamp | Xenon flash lamp |
| Lifetime | 10 ⁶ flashes, up to 10 years |
| Warranty | 1 year |
| Performance verification | Auto diagnostics when switched on |
| Cell types | 15 mm centre height, outside dimension 12.5 mm x 12.5 mm |
| Cuvette storage | capacity for eight 10 mm cells |
| Photometric mode | Abs, %T, concentration, scan, ratio, multi wavelength, kinetics in Δ Abs x factor/min |
| Method storage | Up to 90 methods in user methods |
| Built-in methods | Nucleid acid, microarray (labeling efficiency), protein and cell density |
| Display formats | 320 x 240 pixels |
| Size | 140 mm x 275 mm x 380 mm |
| Weight | < 4.5 kg |
| Operating voltage | 90-250 V, 50/60 Hz, Max 30 VA |
| Input / Output ports | SD Memory Card, USB or Bluetooth for connection to a PC for direct data download for spreadsheet calculations, printout and data storage |

Features and specifications are subject to change without notice.



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