NANOCOLOR® 500 D

Universal photometer for the lab and on the road

The photometer *NANOCOLOR*® 500 D is the link between our spectrophotometers and our handy compact photometers. The device contains all measurement options important in the laboratory and is therefore versatile. The combination of extremely short measurement times and accurate results render this photometer the ideal instrument for the universal use in water and wastewater analysis. It combines established and reliable technology with a robust design. The *NANOCOLOR*® 500 D comes in a rugged case, which provides space for the complete scope of delivery. Together with the inbuilt rechargeable battery, the *NANOCOLOR*® 500 D is perfectly suited for the analysis in the laboratory or on the road.

All at a glance

Its simple operation enables measurement results within seconds. The *NANOCOLOR*® 500 D is delivered with an extensive manual, for the evaluation of *NANOCOLOR*® tests kits, with easy to understand pictogram instructions, which enable a reliable test performance without a complex guidance. The backlit graphic display presents all important data at a glance. Out-of-limit results are clearly indicated.

Basic functions and programming

In addition to the pre-programmed methods, the *NANOCOLOR*® 500 D offers comprehensive basic functions such as absorbance, transmittance or kinetic measurements. Up to 100 methods can be individually programmed for customized applications. The calibration data required for these methods can be obtained by creating the respective calibration curves using the PC software.

Data management and documentation

The alphanumeric keypad allows entering of additional sample information for each measurement result and therefore a clean assignment of the samples. It can store up to 500 GLP-compliant results, which can be exported via the RS232 or USB interface. The measurement results of the *NANOCOLOR*® 500 D can be easily accessed in combination with the free of charge *NANOCOLOR*® data export software.

Good to know

> **Good to know**
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> The *NANOCOLOR*® 500 D has successfully passed the shock test according to Military Standard 810C. It therefore meets the strict requirements of the German military forces, which confirms its robustness and suitability for the mobile analysis.

> **Good to know**
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> For an overview of *NANOCOLOR*® tube tests and rectangular test kits compatible with the *NANOCOLOR*® 500 D see page 88 and 94.

Ordering information

Description	REF
◻ Universal photometer *NANOCOLOR*® 500 D incl. software DVD, manual, protective covering, mains adapter, data cable, USB cable, calibration cuvette, cleaning cloth and certificate in rugged case	919 500

Devices

NANOCOLOR® 500 D

Approved

- Simplest operation without the need for extensive trainings
- Turn on – Measure – Read in less than 10 seconds
- Robust technique for high resistance

Versatile

- Flexible use in lab and on the road
- Universal cuvette slot
- Applicable in all fields of water and waste water analysis

Safe

- Barcode recognition for automatic method selection
- Automatic functional testing and auto-calibration
- GLP-conform data storage via PC-software

Technical data

NANOCOLOR® 500 D	
Type	Filter photometer with microprocessor control, self-test and auto-calibration
Optics	Automatic filter wheel with 10 interference filters Insensitive to external light for fast measurements without cuvette slot cover
Wavelengths	345 nm / 365 nm / 436 nm / 470 nm / 520 nm / 540 nm / 585 nm / 620 nm / 690 nm / 800 nm plus 2 compartments for additional filters
Wavelength accuracy	± 2 nm, bandwidth at half transmission 10 nm–12 nm
Light source	Tungsten lamp
Detector	Silicon photodiode
Blank value	Automatic
Measuring modes	Over 100 preprogrammed methods, 100 freely programmable methods, absorbance, transmittance, factor, kinetics, 2-point-calibration
Compatible test kits	NANOCOLOR® tube tests (see page 88) NANOCOLOR® standard tests (see page 94)
Photometric range	± 3 A
Photometric accuracy	± 1 %
Stability	< 0.002 A/h
Cuvette slot	Tubes 16 mm OD Rectangular cuvettes 10 mm, 20 mm, 50 mm
Data memory	500 results, GLP-compliant
Display	Backlit graphic display, 128 x 64 pixel, all important data at a glance: Result with unit, date, time, sample number, sample location, dilution
Auto-off function	Inactive or automatic shutdown after 10 min–120 min (10 min increments)
Quality control	With NANOCONTROL NANOCHECK
Operation	Test selection via barcode technology, self-explanatory menu guidance, foil keypad
Languages	DE / EN / FR / IT / NL / ES / HU / PL / PT / CZ / SL / TR / ID / DK
Interface	USB, RS232
Update	Free of charge via Internet / PC
Operating range	10 °C–40 °C, up to 80 % relative humidity (non-condensing)
Power supply	100 V–240 V~, 50 / 60 Hz / 6 V, 3.2 Ah via built-in battery with charge regulator and mains power supply
Dimensions	227 mm x 282 mm x 105 mm
Weight	2.4 kg
Warranty	2 years
CE	CE certified