

Photometer DEN-600

Description

The Photometer 600 is a compact, portable, rechargeable, battery-operated photometer. It features an optical system with a wavelength of 600 nm.

The device serves as a cost-effective alternative to the spectrophotometer typically used for these applications.

Thanks to its battery operation, the DEN-600 offers great flexibility; it can be set up in workstations or anaerobic chambers, as well as used in other locations.

Sample Holder

- Standard cuvettes with 10 mm path length
- Round-bottom or conical-bottom tubes
- Falcon tubes (measurement of absorbance and turbidity in Abs (OD) or McF units)

Methods

- OD600 method that estimated total number of cells;
- McFarland (McF) turbidity measurement;
- Bradford protein assay method for protein concentration measurement.

USB and DEN Software

- Data transfer;
- Data processing and calculation;
- Software calibration for Bradford-Protein-Assay method;
- Custom calibration for a specifically applicable vessel;
- Custom turbidity standards
- OD600 in the software is the absorbance at 600 nm measured by the DEN-600, numerically identical to the Abs value.

Applications

- Cell concentration measurement
- Cell growth data estimation
- Log phase estimation for microbial cells induction
- Competent cell preparation
- Bradford protein assay method
- Antibiotic susceptibility testing
- Inhibitory tests



Photometer DEN-600 with standard cuvette



Photometer DEN-600 with calibration kit



Photometer DEN-600 back

Photometer DEN-600



Technical Data

Measurement Specifications		
Light source	LED, self-calibrating	
Photodetector	Silicone photodiode	
Measurement wavelength (λ)	600 nm $\pm$ 10 nm	
Vessel type	Cuvettes, round bottom tubes 12-16 mm, conical vials 12-16 mm, Falcon tubes	
Measurement mode	Absorbance (Abs)	McFarland (McF)
Measurement range	0 – 3.000 Abs	0.00 – 16.00 McF
Resolution	0.001 Abs	0.01 McF
Accuracy	$\pm$ 0.006 @ 1 Abs	$\pm$ 0.1 @ 0-8 McF
Reproducibility	$\pm$ 0.003 @ 1 Abs	$\pm$ 0.05 @ 0-8 McF
General Specifications		
Battery type	Li-Ion (Lithium-ion polymer battery (LiPo))	
Display	LCD	
PC system requirements	Intel/AMD Processor, 1 GB RAM, Windows 10/11, USB	
Weight	0.5 kg	
Dimensions (W x D x H)	120 x 145 x 65 mm	
External power supply	Input AC 100-240 V 50/60Hz, Output DC 12 V	
Order No. DEN-600	103.3506	

Photometer DEN-600



Accessories



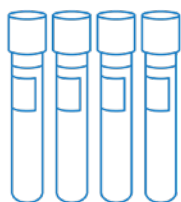
Glas Test Tubes 16 mm

Glas test tubes made from borosilicate
Lid: PP cap with silicone pad
Height: 100 mm
Diameter: 16 mm
Packaging unit: 100 pcs/box



Kalibration Kit CKG16

Für glas tubes with 16 mm diameter.
Set of 0.5; 1.0; 2.0; 3.0; 4.0 McFarland Turbidity Standards (latex particles).



Calibration kit d12mm

For McFarland-Turbidity Standards,
Diameter: 12 mm



Verification Set for Abs

Certified reference material.
Neutral density glass filter set of 4 Abs calibration points - 0.3532, 1.0512, 2.0425, 2.927 (the values may vary slightly from batch to batch).