

# DEN-600, Photometer

## DESCRIPTION

**DEN-600** is a compact, portable, rechargeable battery powered photometer. DEN-600 comprises of 600 nm wavelength optical system, which enables to apply - 1) OD600 method that estimated total number of cells, 2) McFarland (McF) turbidity measurement method, 3) Bradford protein assay method for protein concentration measurement.

The device serves as an inexpensive alternative to a spectrophotometer, which is commonly used for these applications. Because DEN-600 is battery powered and compact, it can be comfortably located in a biosafety cabinet, anaerobic chamber or quickly moved to another lab room. Additionally, the vessel holding mechanism allows accommodating standard 10 mm path cuvettes, round bottom, conical vials or falcon tubes, therefore enabling to measure the absorbance and turbidity in Abs, OD or McF units.

USB connectivity and DEN software allow for data transfer, data processing and calculation, software calibration for Bradford protein assay method or a custom calibration for a specifically applicable vessel and custom turbidity standards.

Common applications include:

- 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



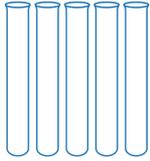
## CAT. NUMBER

|               |                               |
|---------------|-------------------------------|
| BS-050109-AAA | 230VAC 50/60Hz Euro plug      |
| BS-050109-AAK | 100-250VAC 50/60Hz Multi plug |

## SPECIFICATIONS

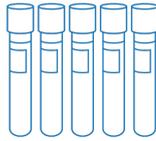
|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| Light source               | LED, self-calibrating                                    |
| Photodetector              | Silicone photodiode                                      |
| Measurement wavelength (λ) | 600 nm ±10 nm                                            |
| Vessel type                | Cuvettes, round bottom tubes, falcon tubes               |
| Measurement modes          | Absorbance (Abs), McFarland (McF)                        |
| Measurement range          | 0 – 3.0 Abs   0 - 16.00 McF                              |
| Resolution                 | 0.001 Abs   0.01 McF                                     |
| Accuracy                   | ±0.006 @ 1 Abs   ±0.1 @ 0-8 McF                          |
| Repeatability              | ±0.003 @ 1 Abs   ±0.05 @ 0-8 McF                         |
| Battery type               | Li-Ion                                                   |
| PC system requirements:    | Intel/AMD Processor, 1 GB RAM, Windows Vista/7/8/10, USB |
| Dimensions (W×D×H)         | 120 × 145 × 65 mm                                        |
| Weight                     | 0.5 kg                                                   |
| External power supply      | Input AC 100–240 V 50/60 Hz, Output DC 12 V              |

## ACCESSORIES



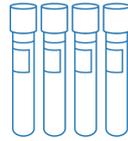
**Glass sample tubes**  
BS-050102-LK

Glass sample tubes without lid  
(16x100x0.8mm), 78 pcs. Fits  
DEN-1, DEN-1B factory  
calibrated



**CKG16**  
BS-050102-BK  
Calibration kit

**CKG16** for glass tubes with  
diameter 16 mm, set of 0.5; 1.0;  
2.0; 3.0; 4.0 McFarland Turbidity  
Standards (latex particles).



**Calibration kit**  
ø12mm  
d12mm

McFarland Turbidity Standards,  
Ø12mm

**Neutral density glass filter set of 4**  
BS-050109-AK

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)