

# HANDHELD PHOTOMETER FOR ALGAE TECHNOLOGIES

## SPECIFICATIONS

Wavelengths for full version - 430, 470, 525, 565, 595, 620, 680 and 750 nm

Wavelengths for budget version- 680 and 750 nm

Absorbance range - 0.00-2.00

Cuvette size – standard 10 mm

Percent error - no more than 0.5%

Power Supply - from 4 AA batteries or 6V AC adapter

Dimensions - 9.0 x 4.7 x 2.0 inches (H x W x D, approximate)

Weight -1.3 lbs.



- Analysis of Chemical Components
- Monitoring of Natural and Waste Waters Composition
- Agrochemical Research

The photometer works separately providing indication of absorbance (A) and transmittance (T) or with a direct connection to computer. The special software executes: calibration and measurement procedures control; data processing by LSM method; plotting the data, saving, printing and export the data to text and Excel files.

The instrument provides express monitoring of algae biomass concentration and can be used for measuring the accumulation of high-value pigments. Various chemical elements and compositions in water, culture fluid and soil (soil extracts) could be easily measured with using a suggested reagents kit.

The full version of the instrument (8-wavelengths) would be very helpful for scientific research at all stages of the algae biomass and biotechnology development processes, from lab experiments to scaling-up operations. The budget version of the device (2-wavelengths) would be recommended broadly for the algae biomass industry and for educational and training purposes.