

Photobioreactor

The photobioreactor Algaemaster 10 is the perfect equipment supporting scientists to find and re-create the ideal conditions for growing phototrophic organisms such as microalgae. These are increasingly of interest for translational science; e.g. drug discovery in the pharmaceutical industry.

With our ocean water resistant and autoclavable system you are more than well prepared for your individual research activities.

Controller

It provides all features necessary for the growing process of the organisms. With its slim design, it can sit right next to the reactor on the bench allowing for easy operation.





The customizable lid can be autoclaved as it is made of Ultem® thermoplastic that has been tested for durability. Sensors are inserted through the lid using different receptables.

1 | PT 100 temperature sensor ensures proper climate conditions

4 | Motor

2 | Adaptors 6, 8, and 12mm openings, ½" NPT threaded **3 | Lid** made of autoclavable Ultem® thermoplastic

coupling stirring with a speed range of 10 – 100 rpm **5 | pH sensor** to monitor ambient changes

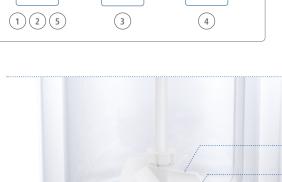
6 | LED positioning adaptable to requirements











10 L REACTOR VESSEL

The 10 liter jacketed reactor vessel has quick fit connectors which make it simple to hook up a thermostat. When using a temperature sensor or pH sensor a minimum of six liters is required.

1 | Stirring element PTFE-coated with two height-adjustable propellers

(1)

2 | Sparger for adding gas e.g. CO_2

3 | Jacketed reactor vessel provides quick fit connectors to easily attach a thermostat



4 | LED light panels for individual and variable lighting conditions





CONTROLLER FRONTSIDE

All displays, pumps and interfaces are easily accessible from all angles of the controller (front, top, side and rear). It provides all features to create perfect growing conditions for microalgae.

1 | Two large displays

easy monitoring of all software settings during trial run period



2 | Two gas flow meters

manually adjustable for CO₂ or air shut on/off

3 | Two peristaltic pumps

adding nutrients or other liquids such as ocean water or when diluting the batch

4 | USB port

exporting trial run data

CONTROLLER REAR

03 1N (200 2N) (2) (3) (4) (5)

1 | 2x gas-inconnectors

max. 1bar

2 | RS 232 / USB port

connecting to a PC

3 | 4x connectors

attaching up to four LED light panels

4 | RS 232

connecting an IKA thermostat for enhanced operation

5 | Motor control interface

CONTROLLER TOP

1 | 2x gas-outconnectors 2 | pH sensor interface

3 | PT 100 interface





KEY FEATURES IKA ALGAEMASTER 10

- > Ocean water resistant and completely autoclavable lid and vessel
- > Metal-free components for sensitive bioactive materials
- > Material touching the product: borosilicate glass, PTFE, Ultem®
- > Computerized control of lighting, temperature, stirring, pH and dosing of liquid or gas
- > Customizable lid with nine receptacles
- > Effortless data collection via USB drive

IKA-Werke GmbH & Co.KG

Janke & Kunkel-Straße 10, 79219 Staufen, Germany Phone: +49 7633 831-0, Fax: +49 7633 831-98 eMail: sales@ika.de, Website: www.ika.com



