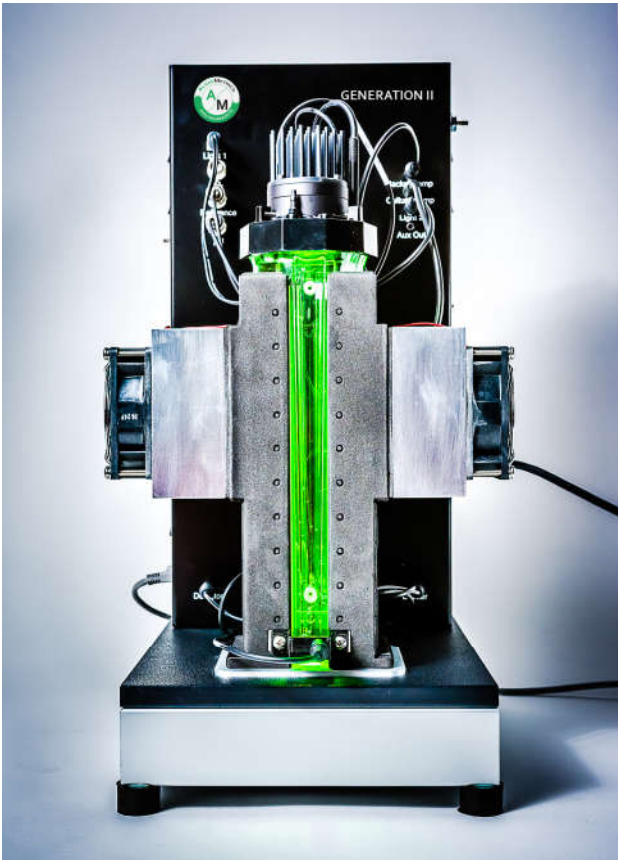




The GENERATION II™ Microalgae Photo Bioreactor

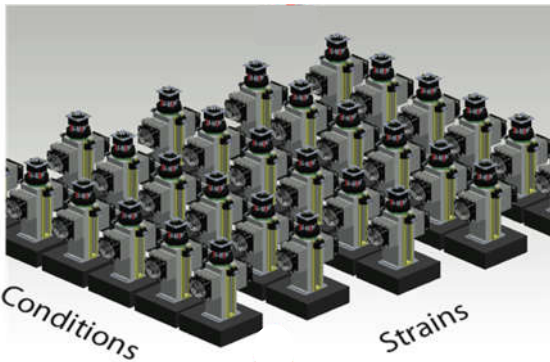


The AlgaeMetrics GENERATION II Photo Bioreactor is the perfect system for large-scale production optimization and laboratory researchers alike.

For the **Production Facility**, the PBR101 has been proven to provide direct scale up (100%, +/- 10%) from bench top to much larger ponds or reactors. It is the only system of its kind to make that claim. Accordingly, it is perfect for optimizing growing conditions in large-scale reactors, raceways, or ponds at a considerably reduced cost and much faster development time.

For the **Researcher**, whether you're working on one strain or exploring many different ones, the PBR101 is ideal because of size, low cost, speed of experiment, and the ability to run multivariate matrix experiments. Save time, money, and resources.

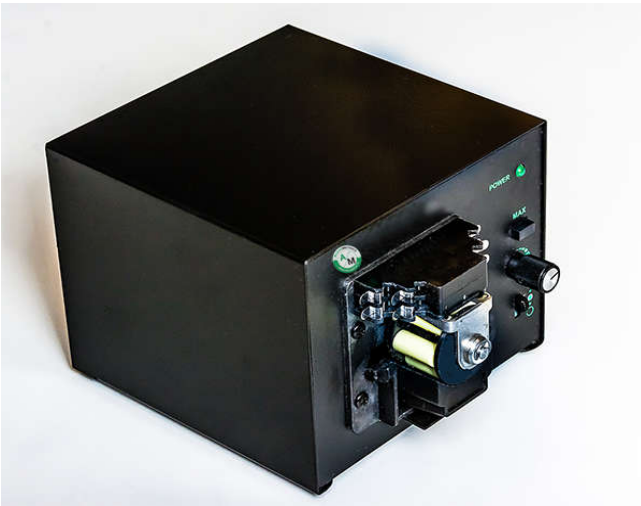
Vary conditions and strains simultaneously



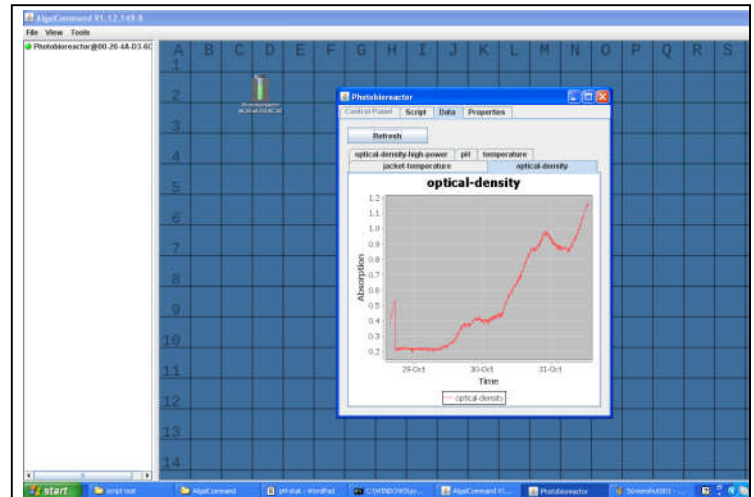
Matrix multiple reactors for optimum productivity

The Most Popular Microalgae Photo Bioreactor in the World!

Powerful and easy to use software allows quick setup of the GENERATION II parameters as well as data analysis of all units in the matrix from a single computer



The optional Turbidostat Pump allows the GENERATION II to be used in a continuous culture mode. The pump is fully computer programmable based on Optical Density



The AlgaeMetrics GENERATION II PBR software enables remote, programmable adjustment of key parameters of the culture's environment:

- Variable light intensity up to full sunlight (>3000 $\mu\text{mol photons m}^{-2} \text{s}^{-1}$)
- Ability to control and adjust light and temperature over diurnal cycles
- Measure and control pH via the software
- Mixing by magnetic stirrer or bubbling (sparging)
- Ability to control CO₂ and other gasses
- Continuous measurement of turbidity to estimate growth rates
- Ability to vary conditions in complex ways by user-customized scripting
- Customizable with specialized probes/configurations

Specifications:

Culture Vessel:	700 cc, 150-650 cc working volume
Control Temperature:	10—50°C
Variable Intensity Light:	>3000 $\mu\text{mol photons m}^{-2} \text{s}^{-1}$
Dimensions:	H-482mm, W-241mm, D-317.5mm, (H-19", W-9.5", D-12.5")
Weight:	7 kg (15lbs)
Power Consumption:	2.4A
Voltage:	110-120V/220-240V 50/60 Hz
Heat output:	470 BTU/hr

Minimum PC requirements: Windows XP/Windows 7 compatible computer, Mac OS 10.4, Linux, minimum 2 GB memory, CD-ROM, Ethernet, Super VGA display with a minimum 800 X 600 resolution and 256 colors.



AlgaeMetrics, Inc.
89 Front Street, Suite 303
Marblehead, MA 01945
www.algaemetrics.com