

Automate & Control:

- light intensity
- pH via CO₂ delivery
- temperature
- harvest schedule
- nutrient delivery
- replace evaporated water
- 4 peristaltic pumps
- reactor rotation speed

Sensors included:

- pH
- temperature
- light intensity (lux)
- energy (kW)
- available on request
 - dissolved O₂
 - CO₂ capture
 - ORP
 - turbidity
 - PNO₃

Efficient mixing

Minimizes fouling

Minimize culture crashes

Real-time graphing of sensor data

Withdraw / insert sensors with ease

Design allows for ease of access to remove or install culture carboy

Efficient mass gas transfer between head space and media, (CO₂ in – O₂ out)

Optimize algae culture growth.



MODEL RF-010

- 10L reactor capacity
- 110V power required
- Wi-Fi / ethernet connectivity
- LED grow lighting
- Sealed reactor for axenic growth



- Touch screen
 - Full monitor / control functionality
 - Sensor data logging and secure cloud data storage
- Access / monitor / control data from desktop computer or smart device

"We doubled the density and yield of spirulina from published values."

Stan Pankratz



Rainforest
ALGAE

Model RF-010 Specifications

- 110-120V AC with 2m power cord
- On-board 12V power supply
- External on/off power switch
- Emergency power OFF switch
- External Cat5 ethernet connection
- On-board Wi-Fi connectivity
- Digital touch screen (8") to monitor / control PBR functions / real-time data graphing. Flush mounted but tilts to 45° for ease of viewing.
- Web-based app enables connecting to PBR to monitor /control / graph system functions in real-time from remote computer and smart phones.
- Collaborate with other researchers
- Secure, cloud-based data-logging
- 4 on-board controllable peristaltic pumps
- 10L cultivation capacity carboy
- 2 cooling fans
- Radiant heating element
- CO₂ control valve
- LED grow lighting



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**Like No Other
Photobioreactor**



Model: RF-010

“Chinook Salmon”

Research 10L Photobioreactor

**“Making the improbable
possible!”**