

# DASGIP PhotoBioreactor

## Advanced Cultivation of Phototrophic Organisms

### Technology

The new DASGIP PhotoBioreactor is specifically designed to use the advantages of the DASGIP Parallel Bioreactor Systems in phototrophic cultivation.

Plant-suspensions, green and red algae as well as phototrophic bacteria like cyanobacteria or green sulfur bacteria can be grown under customized and variable lighting conditions. The spectral composition as well as the light intensities are online adjustable via the DASGIP software. The unique internal arrangement of the DASGIP LED illuminators guarantees most effective and consistent light supply of the culture for highest photosynthesis and growth rates.

Integrated into the DASGIP Parallel Bioreactor System various cultivation parameters such as temperature, agitation, pH, dissolved oxygen concentration, gassing or the redox potential can be continuously monitored and precisely controlled. Online Measurement of the optical density and automated feeding with up to 8 dosing lines per reactor is supported.

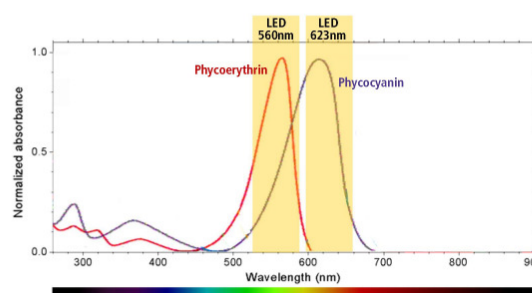
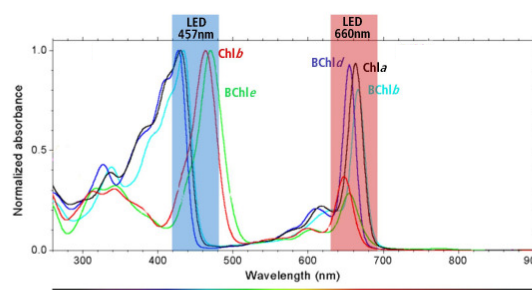


**DASGIP PhotoBioreactor**

### Features at a Glance



- Latest LED technology applied
- Easy application of the illuminators with the DASGIP Benchtop Bioreactor Line DR (possible working volumes of 0.7-2.7 and 0.8-3.8 L)
- Up to 4 illuminators can be internally installed per reactor
- Light spectra are optimized to meet various photosynthesis requirements with 457 nm, 660 nm as well as 560 nm and 623 nm
- Spectral light intensity can be individual controlled via the DASGIP Control Software 4.0



**Absorption maxima of chlorophylls, bacterial chlorophylls and phycobillins; derived from [www.bio.ku.dk](http://www.bio.ku.dk)**

Quality System certified by DQS ■ DIN EN ISO 9001 ■ Reg.-No. 63431