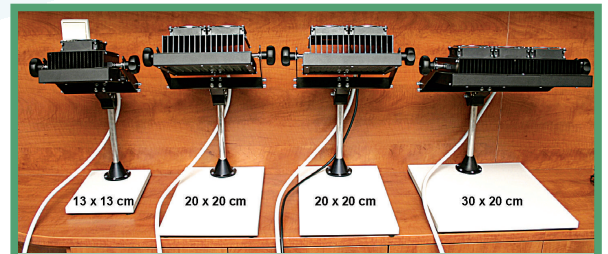




LED-Light Source SL 3500

PSI LED Light Sources are arrays of high-performance light emitting diodes (LEDs) that can operate in multiple regimes: flash, continuous light, harmonically modulated light, or according to user-defined modulation. They can be used as stand-alone units or they can be integrated into other PSI instruments - FluorCams, Photobioreactors or FytoScopes. Their function can be substantially enhanced by the **Light Controller LC 100**, which provides precise control over the light mode, intensity and timing, or by the **Light Studio Software**, which enables computer control of the Light Sources. Both the Light Controller and the Light Studio Software offer the possibility to create user-defined protocols.



INSTRUMENT HIGHLIGHTS

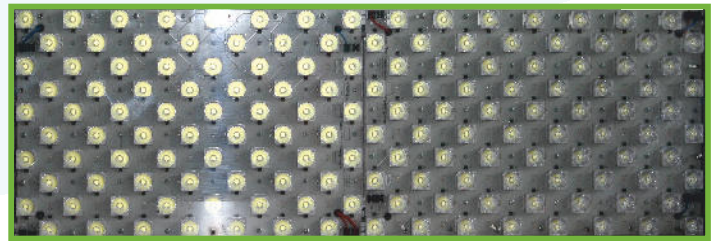
- Panel size: 13 x 13 cm, 20 x 20 cm, 30 x 20 cm
- High light output - up to $3,000 \mu\text{mol}(\text{photon})/\text{m}^2 \cdot \text{s}$ at the distance of 20 cm
- User-defined protocol control - via the Light Controller or Light Studio software
- Manual control - via the control unit
- Uniform light distribution over the desired area
- Different color versions varying spectrally from UVA to Infra-Red
- Bi-color, tri-color versions available
- Automatic cooling of the panel and control unit
- Minimum undesirable heating effects to experimental material



LED Fyto-Panels

LED Fyto-Panels are primarily intended for installation in growth chambers, or for other similar applications where controlled, large-area illumination is of high importance. Fyto-Panels provide high-intensity illumination with uniform light distribution. They are manufactured as single color and optionally also multi-color series with each color being separately controllable in intensity. In most LED Fyto-Panel models, infrared LEDs (735 nm) are added to ensure optimal conditions for plant growth. Infrared LEDs can also be controlled separately.

Single LED Fyto-Panel dimension is 27 x 81 cm. Fyto-Panels can be easily interconnected if larger area needs to be illuminated. LED Fyto-Panels are operated through a PC program provided. Optionally, Fyto-Panels can be supplied with the Light Controller or Light Studio Software; they both enable precise control of the light mode, timing and intensity via user-defined protocols. In addition, special protocols for daylight mimicking or cloudy sky simulation may be provided.



INSTRUMENT HIGHLIGHTS

- User defined protocol control – via the Light Controller LC 100 or Light Studio software
- Light intensity in the range from 200 to 1,500 $\mu\text{mol}/\text{m}^2 \cdot \text{s}$ (at the distance of 100 cm)
- Uniform light distribution over the desired area
- Standard panel setup: cool white LEDs with added IR LEDs (735 nm)
- Optionally, bi-color and multi-color versions available with each color being separately controllable in intensity, timing and modulation
- Minimum undesirable heating effects to experimental material
- Automatic cooling of the panel

