

FMS / PTL

Description



The PAR/temperature leafclip is available to facilitate measurements made under ambient light conditions using the FMS 2+ chlorophyll fluorimeter. Chlorophyll fluorescence measurements can be made quite satisfactorily without the leafclip but a value of PAR from the light sensor on the leafclip is essential for the estimation of electron transport rate () by the FMS software. Other chlorophyll fluorescence parameters are unaffected if the system is operated without the leafclip.

The FMS/PTL leafclip consists of a sprung upper section which gently grips the sample in a gentle clamping action. A grooved neck mounted at 60° to the plane of the sample accommodates the fibre optic cable which is slid into position.

Marked graduations on the neck can be aligned with graduations on the fibre-optic cable termination to reference its position for future work, a retaining screw locks it into position throughout the experiment. The rest of the fibre-optic cable may be looped over the leafclip and hooked to the rear of the clip to help support its weight. A fully cosine corrected PAR sensor and 0°C – 90°C thermocouple are also fitted to the FMS/PTL.

An electrical connection to the leafclip socket on the front panel of the FMS 2+ chlorophyll fluorimeter enables the use of the remote trigger switch to activate/abort measurements in local mode and connect the leafclip thermocouple and light sensor to the control unit. The leafclip may be held in the hand if multiple samples are being studied or mounted on a standard tripod mount via a thread in the lower clip section for fixed-position work.

The PAR sensor has been designed for both recordings of ambient light intensities during fluorescence analysis and measurement of FMS actinic and saturating light sources during instrument setup