



FluorCams – Imaging Fluorometers

Handy FluorCam FC 1000-H is a lightweight, portable system for imaging of chlorophyll fluorescence kinetics in small plants, leaves or leaf segments, mosses, lichens, plated algal colonies, etc. The Handy FluorCam is delivered with a laptop computer preinstalled with a comprehensive software package comprising full system control, data acquisition and image processing. It may be equipped with a high-resolution camera and an additional leaf clip for handling larger leaves.

KEY FEATURES

- Both lab and field applications
- Portable system (21.5 cm x 13.5 cm x 13.5 cm)
- AC & battery powered
- Supplied with a laptop computer and software
- High-sensitivity CCD camera
- Imaged area: 3.5 x 3.5 cm

APPLICATIONS

- Screening for photosynthetic performance and metabolic perturbations
- Detection of biotic and abiotic stress
- Plant's resistance or susceptibility to various stress factors
- Plant-microbe interactions
- Agriculture and horticulture
- Yield improvement



PREDEFINED OR USER-DESIGNED PROTOCOLS

- F_v/F_m
- Kautsky induction
- Quenching analysis
- Light curve





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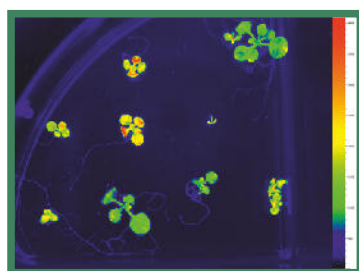
Handy GFPCam FC 1000-H-GFP is a modified version of the popular Handy FluorCam. Its unique construction allows both chlorophyll fluorescence and GFP imaging. The appropriate emission filter for GFP and chlorophyll detection is manually interchangeable. Handy GFPCam is typically produced with red-orange flashing LED panels (620 nm) and blue actinic/saturating pulse LED panels (455 nm). The LED panels provide uniform irradiance over an area 3.5 x 3.5 cm – suitable for imaging of seedlings, small plants, native or detached leaf segments, etc. It is recommended to equip the GFPCam with a high-resolution CCD camera which is specifically intended for detection of weak signals demanding long integration times. Such setup retains most of the functionalities for chlorophyll fluorescence kinetics measurement.

KEY FEATURES

- Combined imaging of GFP and chlorophyll fluorescence
- Both lab and field applications
- Portable and compact (21.5 cm x 13.5 cm x 13.5 cm)
- AC & battery powered
- Coming with a high-end computer and user-friendly software
- High-resolution CCD camera (recommended)
- Imaged area: 3.5 x 3.5 cm

SUPPORTED PROTOCOLS

- F_v/F_m
- Kautsky induction
- Quenching analysis
- Light curve
- Steady-state GFP fluorescence



APPLICATION

- Screening for GFP-containing GMOs
- Transgenic expression & localization
- Plant-microbe interactions
- Bacterial-protozoan interactions
- Screening for photosynthetic performance
- Stress resistance studies