Successor to the renowned PAM-101 series, the Dual-PAM-100 will profoundly change photosynthesis research by providing both specialists and non-specialists unprecedented measurement capabilities of Photosystem I and II.

Based on a highly innovative pulse-modulation technique, absorbance changes of P700 (reaction center chlorophyll of PS I) are measured with a similar signal/noise ratio as Chl fluorescence. The Saturation Pulse method was extended to provide analogous information on PS I via P700 as is obtained via Chl fluorescence on PS II.

Simultaneous Assessment of PSI and PSII Quantum Yields.

DualPAM software executes pre-programmed measuring routines with ease and also allows user to create custom test routines.

All essential light sources (fluorescence excitation light, NIR P700 measuring light, red and blue actinic light, single and multiple turnover saturating flashes, far red light) are integrated in the basic system.

Optional emitter-detector modules for measuring other key photosynthesis parameters (∆pH, P515, membrane potential, NADPH).

GFS-3000
Portable Gas Exchange Fluorescence System
4-Channel IRGA (2 x CO₂; 2 x H₂O abs. 20 cm optical path)
Integrated H₂O control for Drying & Humidifying.
Integrated CO₂ control (0-2000 ppm)
Transreflective touch screen display provides excellent graphical plots in the field.
On-board "tours" effortlessly guide the novice user through the main steps of operation.
Simultaneous assessment of Chlorophyll Fluorescence.