Name	Walz Phyto-PAM
Description	The PHYTO-PAM can be used to assess the photosynthetic performance and light-adaptation status of the various types of phytoplankton. Furthermore, it allows to determine the content of active chlorophyll in natural surface waters down to 0.1 µg Chl/l, and also to differentiate between differently pigmented groups of algae (green algae, diatoms and cyanobacteria). Fluorescence is excited alternatingly at high repetition rates by µsec pulses of 470, 520, 645 and 665 nm light originating from light emitting diodes (LED). A miniature photomultiplier detector serves for extremely sensitive fluorescence detection. It is protected against light damage by automatic switch-off circuitry. A Spherical Micro Quantum Sensor US-SQS is included to measure the photosynthetically active radiation (PAR) within the two types of cuvettes to calibrate the light list of the PHYTO-PAM. Two PHYTO-PAM system versions with different emitter-detector units are available for different types of samples. They are all based on the same central Power-and-Control-Unit PHYTO-C: • MODULAR version, with separate LED-array cones for measuring light and actinic illumination, featuring a 10 x 10 mm cuvette. • COMPACT version as more portable unit for field applications, with all opto-electronical components being mounted in one miniature housing, featuring 15 mm Ø round cuvette.
Services	Measure of photosynthetic performance and light-adaptation status on natural samples Measure of photosynthetic performance and light-adaptation status on microalgal coltures Measure of photosynthetic performance and light-adaptation status in laboratory experiments
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