Aquation®
Water Quality • Plant Health • Environment Assessment

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Classic Fluorometer Wireless Benchtop

Aquation's **Classic Fluorometer Wireless Benchtop** measures the quantum yield of PSII photochemistry using the modulated multiple-turnover PAM technique and is designed for use both in the field and lab. The sensor is water resistant to 2 m depth; it is designed for convenient measurement of wet material including aquatic plants and even coral. The sensor is controlled via a wireless link, enabling the PC to be kept away from water.

Features

- Measures F_o, F_m, F_v/F_m, F', F_o', F_m', ϕ_{II}
- Enables calculation of qE, qI, qN, qP, NPQ
- Measures relative Chlorophyll index (function of gain and F_o)
- Water resistant sensor for field applications
- Wireless link enables PC to be kept dry and away from sampling area
- Simple operation allows rapid screening.
- Powered from battery or mains; repeated measurements are possible when attached to PC or datalogger
- Easy-to-use software with an uncluttered interface
- Extensive programmable capacity in software for advanced users
- Portable and lightweight. Can be used in the field with suitable waterproof case

Aquation's **Classic Fluorometer Wireless Benchtop** is a portable fluorometer for rapid assessment of plant stress both in the field and in the lab. The Classic Fluorometer uses the PAM technique to measure photochemical efficiency as ϕ_{II} or as Fv/Fm.

Chlorophyll-containing samples are simply placed over the sampling window for single or repeated measurements. An optional clear light pipe extension enables measurement of samples 0.5m from the sensor; this is particularly useful for long term measurements where shading of the sample must be avoided.

The **Classic Benchtop Wireless fluorometer** is designed to be operated from a PC (Windows XP and later). A small transceiver plugs into the computer USB port and wirelessly connects to the sensor. This enables the computer to be located separately from the sensor, for example in a dry part of a greenhouse. Both power and the fluorescence sensor are connected to the interface enclosure. All items are contained in a lightweight carry case that is small enough to fit in a shoulder bag.

See over for further detail.

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Specifications	
Maximum Depth	Sensor: 2 m
Max Pressure	0.2 bar
Housing material	Sensor: acetal and 316 stainless. Interface: strengthened aluminium
Power supply	110-240 VAC mains, or 12-24 VDC battery
Power consumption	12 W (24 W maximum)
Weight	1.5 kg
Size	27.5 x 8.3 x 34.0 cm
Excitation Wavelength	470 nm
Detector	photodiode
Range	>695 nm
Interface	custom software: AquationDirect
Connector	Bulgin
Operating temperature	0-45 °C

Leaf clip, light pipe and light pipe holder. The holder fits over the sensor, enabling a light pipe to convey signal to and from the sample, which is unshaded.

Applications:

- Ecotoxicology
- Phenotype screening
- Plant health monitoring
- Benchtop studies
- Greenhouse and aquaria studies
- Teaching

AquationDirect is used to communicate with the fluorometer.

Our clutter-free approach hides features when not in use, providing a clearer screen.

There are three levels of control:

"Profile" defines settings for each measurement (measuring light intensity, saturating pulse intensity etc.).

"Program" defines a sequence of yield measurements, actinic treatments and far-red light treatments. The intensity and duration of each light can be defined. A Light Curve and Recovery Curve generator provides flexible generation of curves with user-defined actinic intensities and durations. Even reverse light curves can be defined if required.

"Schedule" runs multiple Programs sequentially, e.g. Program 1 during the early morning, Program 2 at midday, Program 3 in the afternoon, Program 4 at night.

From left to right: USB Wireless unit, Fluorescence Sensor, Power plug, Wireless Interface box

For detailed information about these and other Aquation products visit our website **www.aquation.com.au**