



ISO 9001
Version 2008

EQUIPEMENTS SCIENTIFIQUES S.A.

Société anonyme au capital de 3.290.000 Euros

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Algal Online Monitor (AOM)

Algal Online Monitor is a portable and robust device for online detection and continuous monitoring of photosynthetic microorganisms in both natural and artificial water bodies. It detects and discriminates among variety of cyanobacteria, green and brown algae, diatoms, and other microbes. Its **ultra-high sensitivity (30 ng Chl/l)** allows early detection of very low concentrations of these organisms.



Measured / Calculated Parameters:

- **F_T** : Instantaneous Fluorescence
- **QY**: Quantum Yield
- **OJIP - Fix Area**:
Total area above the OJIP fluorescence transient. This parameter correlates with total change of fluorescence signal in OJIP protocol, with total pigment content and hence with cell concentration.

Features:

- Ultra-high sensitive, flow-through monitoring.
- Detection limit 30 ng Chl/l.
- Wide range of detected organisms: cyanobacteria, green and brown algae, diatoms, and other microorganisms.
- Variable excitation colors.
- Turbidity measurement.
- Device modifications for phycoerythrin or phycocyanin (optional).



Applications:

- Water treatment monitoring.
- Early detection of potentially harmful algae blooms.
- Effective control of water treatment chemicals.



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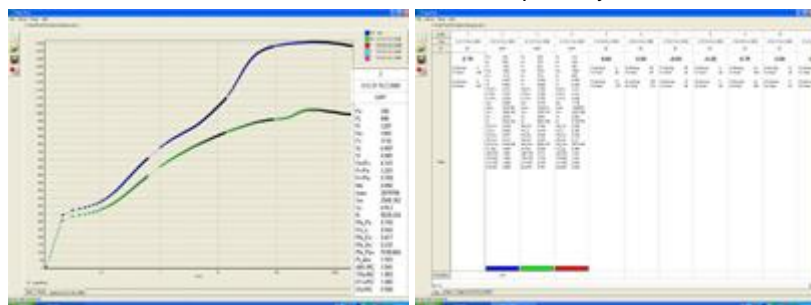
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NEW FluorPen 1.0 Software

- Real-time data collection for online measurements.
- Both internal data storage and external communication.
- Data export to Excel for analysis or visualization applications.
- Windows 2000* and Windows XP* compatibility.



FluorPen 2.0: Graph and Data Windows

Technical Specification:

- **Measured Fluorescence Parameters:**
F_T, QY, OJIP - Fix Area
- **Detection Limit:**
Algae - 10 cells/ml
Cyanobacteria - 100 cells/ml
- **Actinic and Saturating Light Intensity:**
Adjustable from 0 to 3,000 $\mu\text{mol}(\text{photons})/\text{m}^2.\text{s}$
- **Measuring Light Intensity:**
Blue (455 nm) and red (630 nm) measuring light adjustable by intensity
Blue (455 nm) and amber (590 nm) measuring light adjustable by intensity
- **Detector Wavelength Range:**
PIN photodiode with 660 nm - 750 nm bandpass filters
- **Sample Compartment:**
Flow-through cuvette made of quartz glass
- **FluorPen 1.0 Software:**
Windows 2000, XP or higher*
- **Bios:**
Upgradeable firmware
- **Communication:**
Serial RS 232, RS 485
- **Display:**
AOM 2800: 2 x 16 characters LC display
AOM 2700: without display
- **Memory Capacity:**
4 Mb – up to 100,000 data points (about 300 OJIP curves)
- **Power Supply:**
24 V (optionally 12 V)
- **Power Saving Mode:**
Automatic
- **Case:**
IP65
- **Temperature Range:**
0 to 45 °C
- **Dimensions:**
20 x 23 x 11 cm
- **Weight**
3.4 kg

* Windows is a registered trademark of Microsoft Corporation