



## BBE Algae Guard

### Features:

- Total Chlorophyll-a determination
- Quantification of algal classes: green, blue-green (cyanobacteria), brown (diatom and dinoflagellates) and cryptophyce
- Yellow substances detection
- Automatic cleaning
- 4 integrated relays
- Optional 4-20 mA outputs
- Optional Mode
- RS232 interface
- Touchpad display
- Optional operation with PC for extra functionality



Algae guard

### Total Chlorophyll with Algal class differentiation

### Benefits:

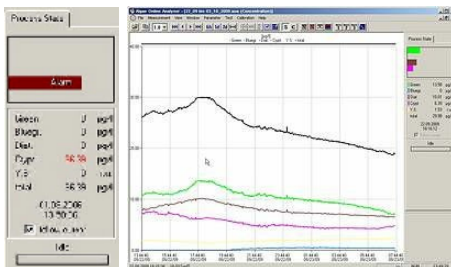
- Plug & play operation
- Immediate real time data
- No special skills required
- No chemicals or reagents
- Minimal maintenance requirement
- May be used to control abstraction
- Pumps and raise alarms

### Applications:

- Abstraction monitoring
- Lake & river monitoring
- Power plant monitoring
- Environmental monitoring
- Research & development



Algae guard sensor



Alarm and graphical displays



Touch screen display



The **Algae Guard** is a simplified version of the Algal on line analyser from BBE. It is a continuously operating online fluorometer. The sample is irradiated by 6 LEDs of different wavelength emissions and the algal fluorescence at each wavelength measured. The spectra are mathematically processed using multiple linear regression techniques to give the best estimate of the amount of different algal classes present together with the total Chlorophyll a from all algal sources. Yellow substances, which also fluoresce are measured with an extra LED and the results compensated for this fluorescence. Data is not stored and graphical representation is not available in the basic machine, however it may be connected to a PC running the AOA software which will then provide these facilities if required.

Technical data	
Type:	On line multi wavelength
Optics:	6 LED light sources with photomultiplier detector
Measurands:	Total chlorophyll [ g chl a/l] Concentration of green algae [ g chl a/l] Concentration of blue green algae [ g chl a/l] Concentration of diatoms [ g chl a/l] Concentration of cryptophyceae [ g chl a/l] Yellow substance correction
Measuring range	0-200 µg chl a/l
Resolution	0.05 µg chl a/l
Weight	16 kg
Housing protection	IP54
Size (H x W x D)	420 x 520 x 200 mm
Power supply	110/230 V @ 50/60 Hz or 110 V / 60 Hz
Power input	30 W
Sample temperature	0-40° C
Sample volume	30 ml
Display	Touch screen
Interface	RS232 MODBUS
Optional interfaces	up to 16 x 4-20mA (analog) and 16 digital outputs
Maintenance interval	>7 days

Optional	
Please indicate	
1. What digital and analogue outputs are required	
2. Whether a weather proof housing is required	
3. Whether PC operation is required	