

# **EM-400**

# In-Vivo Chlorophyll-a Fluorometer

### **Product Description**

The Pyxis EM-400 handheld algae fluorometer measures the in-vivo chlorophyll-a concentration in live algae cells in water. Chlorophyll-a is the major photosynthetic pigment of algae and when measured can be used to assess algal biomass in the bulk-water of the system being evaluated. The EM-400 fluorometer provides instant and direct-read (reagent-less) measurement capability to understand the algae growth dynamic in your system and can be used for alarming or predictive algicide dosing.

### **Typical Applications**

- Open Recirculating Cooling Water
- Cooling / Evaporation Ponds
- Final Outfall
- Membrane Influent
- Hydroponic Systems
- Irrigation Systems
- Surface Water

# Pyxis EM-400 MEASUREMENT Chlorophyll-A 22 ppb Calibration Info

EM-400

### **Features**

- Factory Calibrated using living algae sample
- Field Calibrated with Pyxis Synthetic Secondary Chlorophyll-a Solution (CHLORO-20)
- Customized Calibration Capable with real-world sample
- Compensation for background sample color and turbidity
- User friendly menu driven process
- Direct sample pour design no cuvettes or reagents needed
- Sample Cell Cleanliness Diagnostics
- Bluetooth Capable for data upload via uPyxis Mobile or Desktop APP

## **Specifications**

Item	EM-400	
P/N	50508	
Measurement Range	0.3 – 100 ppb (in-vivo Chlorophyll-a)	
Excitation Wavelength	470nm LED	
Emission Wavelength	675nm	
Wavelength Accuracy	<u>+</u> 1nm	
Detection Limit	0.3 ppb	
Accuracy	<u>+</u> 2% or 4 ppb	
Calibration Solution Point	20ppb Synthetic Chlorophyll-a Standard Solution (Pyxis Lab)	
Battery	4 AA alkaline batteries	
Typical Battery Life	3200 readings	
Display	320x240 TFT-LCD, visible under direct sunlight	
Dimension	L170.W80.H45 (mm)	
Weight	400g (without battery)	
Temperature Range	40 to 106 °F (4 to 41 °C)	
Humidity	85% at 106 °F (41 °C)	
Environmental	IP67, dustproof and waterproof	
Regulation	CE / RoHS Marked	

<sup>\*</sup>The fluorescent chlorophyll-a concentration scale is based on both living algae and synthetic secondary standard in a range of 0-50ppb. Calibration of this unit using on-site sample may be performed for customization as desired.

### **Optional Accessories**

Item	P/N	Specification
Pyxis Handheld	SER-02	Pyxis Handheld Sample Well
Cleaning Kit		Cleaning Solution Kit – 500mL
CHLORO-20		Chlorophyll-a Synthetic 20ppb
		Cal. Std. – 500mL
MA-700	50725	Pyxis Handheld Hard Carry Case

**Order Information** 

P/N

EM-400 Handheld in-vivo Chlorophyll-a Fluorometer

50508