# ARES CHLOROPHYLL-A SENSOR

#### XEOS OPTICAL WATER QUALITY SENSORS

The Ares Chlorophyll-A Sensor features state-of-the art technology for measuring chlorophyll concentrations for environmental water quality monitoring, oceanographic research, marine operations and aquaculture monitoring. The Ares is based on the optical measurement principle, using ultra bright energy-efficient blue LEDs as an excitation source and detectors with filtering to measure the red light produced via fluorescence by chlorophyll-a contained in algal cells. These digital optical sensors are programmed with a calibrated response to a fluorescence standard.

#### **Key Features**

- Ultra bright energy-efficient blue LEDs
- Fiber optics to improve efficiency and size
- Individually calibrated with laboratory standards
- Gain switching to maximize resolution
- Digital and analog output
- Anti-biofouling faceplate

The Ares is backed by a fully comprehensive warranty and committed support. To arrange a demonstration or to learn more about our products, please contact us at the numbers below.



### Xeos Technologies Inc Data Telemetry Specialists

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#### **APPLICATIONS:**

Environmental water quality Oceanography & limnology Aquaculture operations Autonomous vehicle surveys Offshore renewable energy projects

# **ARES CHLOROPHYLL-A SENSOR**

## **TECHNICAL SPECIFICATIONS\***

ARES	
General	
Resolution	0.1 μg/L (0-250 range)
Range	Analog: Either 0-25 or 0-250 Digital: Both 0-25 and 0-250
Operating Temperature	$0^{\circ}$ C to $+ 40^{\circ}$ C
Depth Rating	500 m
Optical	
Peak Excitation Wavelength	460 nm
Excitation Bandwidth	18 nm
Detection Wavelength Range	665-1000 nm
Electrical	
Supply Voltage Range	+ 6-18 VDC
Power Supply	External power required
Current Draw @12 V (analog sensor)	18 mA
Current Draw @12 V (digital & analog sensor)	20 mA
Analog Voltage Out (nominal)	0-5 V
Baud Rate	9600-115200 (38400 default)
Serial Configuration	8 bits, no parity, 1 stop bit, no flow control
Mechanical	
Material	Acetal Plastic With Copper-Nickel Faceplate
Length (excluding connector)	10.60 cm (4.17 in.)
Diameter	3.2 cm (1.25 in.)
Weight	135 g

\*Specifications subject to change without notice

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