ARES DUO SENSOR

XEOS OPTICAL WATER QUALITY SENSORS

The Ares Duo is an all-in-one turbidity and chlorophyll-a sensor designed for easy integration to measure key water quality parameters. Featuring state of the art technology, the Ares Duo is perfect for measuring water clarity 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 infrared and blue LEDs as an excitation source and detectors to measure turbidity using infrared light scattered by suspended particulate material in a water volume. Chlorophyll-a is measured by the red light produced via fluorescence by chlorophyll-a contained in algal cells. These digital optical sensors are programmed with a calibrated response to both turbidity and fluorescence standards.

Key Features

- **Ultra bright energy-efficient LEDs**
- **Fiber optics to improve efficiency and size**
- **Individually calibrated with laboratory standards**
- **Gain switching to maximize resolution**
- **Configurable digital 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.

ARES

APPLICATIONS:

Environmental water quality

Oceanographic research

Aquaculture operations

Autonomous vehicle surveys

Offshore renewable energy projects

Xeos Technologies Inc
Data Telemetry Specialists

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ARES DUO SENSOR

TECHNICAL SPECIFICATIONS*

ARES DUO		
General	**Turbidity**	**Chlorophyll**
Resolution	0.1 NTU (0-1500 range)	0.1 µg/L (0-250 range)
Range	Digital: Both 0-150 and 0-1500 NTU	Digital: Both 0-25 and 0-250 µg/L
Operating Temperature	0° C to + 40° C	
Depth Rating	500 m	
Optical	**Turbidity**	**Chlorophyll**
Excitation Wavelength	850 nm	460 nm
Bandwidth	30 nm	18 nm
Scattering Angle	90 degrees	N/A
Detection Wavelength Range	775-1025 nm	665-1000 nm
Electrical		
Supply Voltage Range	+ 6-18 VDC	
Power Supply	External power required	
Max 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)	10.90 cm (4.30 in.)	
Diameter	4.45 cm (1.75 in.)	
Weight	205 g	

*Specifications subject to change without notice

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