



# Sea-Bird Coastal WQM X

## Water Quality Monitor

The Sea-Bird Coastal WQM X with technology by WET Labs and Sea-Bird Electronics is designed specifically for long-term moored operations in biologically rich water. The WQM X combines WET Labs' state of the art fluorimeters with cutting edge conductivity, temperature, and depth technology from Sea-Bird Electronics to create a monitoring Sonde with unprecedented long-term deployment capabilities.

Ideally suited for unattended monitoring the WQM X employs active flow control, passive flow prevention, light-blocking, active biocide injection and passive inhibitors to effectively and safely combat internal and external fouling. With fouling minimized, the superior inherent stability of the WQM sensors translates directly to superior long-term data quality.

The cost of monitoring is tied to the instrument life cycle and real value is ultimately provided through quality data, day after day, month after month, year after year. The WQM provides quality data while dramatically reducing the need for field and factory service.

# Robust and Reliable In Situ Water Quality Data

## Applications

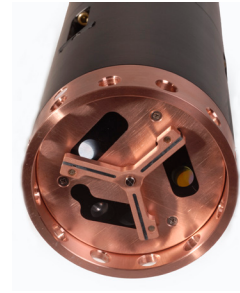
- For continuous or real-time measurement of water quality in:
- Estuaries
- Lakes and reservoirs
- Streams, rivers, channels, or canals

## Performance Features and Benefits

- Robust- Excellent anti-fouling capability provided by EPA approved anti-foulant, internal, pumped flow path and external copper cladding and wiper
- Accurate- High initial accuracy and low drift rate
- Cost Effective- Typical deployment duration of 3- 6 months equals fewer site visits and lower operational costs year after year

## Additional Features

- Additional external port enables the easy integration of an additional sensor
- Field check procedures ensure instrument accuracy



View live WQM data on the LOBO monitoring platform at:  
<http://yaquina.loboviz.com>

## Specifications

Sensors	Range	Accuracy	Typical Stability	Resolution
Optical Dissolved Oxygen	120% of surface saturation in all natural waters <sup>1</sup>	± 2% of saturation	.5% per 1000 hours (clean membrane)	0.035% if saturation
Conductivity	0- 90 mS/cm (0- 90,000 µS/cm)	± 0.003 mS/cm (3 µS/cm)	0.003 mS/cm (3 µS/cm)	0.0001 mS/cm (0.1 µS/cm)
Temperature	-5 to 45°C	± 0.002°C/± 0.01°C (over 32°C)	0.002°C per month	0.0001°C
Pressure	0- 100 m	± 0.1% of full scale range	0.05% of full scale range	0.002% of full scale range
Chlorophyll (Wavelength 470 nm/ 695nm)	0- 30 µg Chl/1, 0- 10 NTU 0- 50 µg Chl/1, 0- 25 NTU 0- 50 µg Chl/1, 0- 100 NTU 0- 75 µg Chl/1, 0- 200 NTU	0.2% FS µg/l	Communication Sample Rate Housing Weight	RS 232 1 Hz 200 m Depth Rating 6.25 kg (13.8 lbs) in air 1.7 kg (3.7 lbs) in water
Turbidity (Wavelength 700 nm)	0- 125 µg Chl/1, 0- 350 NTU 0- 250 µg Chl/1, 0- 1000 NTU	0.1% FS NTU	External Power Current Draw	9 – 16 VDC < 100 mA Sampling 350 mA Peak < 50 µA Sleep
CDOM (Wavelength 370/ 460 nm)	0- 375 ppb	0.28 ppb		