

## Environmental research

Starting as researchers investigating global warming, Ocean Optics has a long history in environmental research. Our optical sensors and miniature spectrometers have been used extensively in areas such as atmospheric sciences, ecology, environmental chemistry and geosciences.

## Application range

- » Analysing solar irradiance and ozone profiles
- » Analysing soil, air and water quality
- » Ground truth data collection
- » Monitoring volcanic activities
- » Monitoring of (endangered) species
- » Measuring mining effects
- » Analysing forest ecosystem dynamics
- » Characterising of gemstones and minerals
- » Corrosion studies
- » Analysis of corals
- » O<sub>2</sub>, SO<sub>2</sub>, NO and NO<sub>2</sub> analysis
- » And many more ...

## Product features

- » Compact and portable design
- » Real time answers (response time in milliseconds)
- » Easy to use
- » Easily integrated into other systems
- » Accurate results
- » Reliable operation
- » Non destructive analysis
- » Custom configurations
- » Automation options using OmniDriver or scripting

# Some of our Products

## Measure irradiance and basic absorption, reflection and transmission measurements with the revolutionary Jaz

Valuable real-time data can be collected in a variety of settings with Jaz. This handheld, field portable analytical instrument has an onboard microprocessor and battery module eliminating the need for a PC. Data can be stored on a SD card and custom algorithms can be programmed to display values instead of spectra for specific applications.



## Differential optical absorption spectroscopy (DOAS), fluorescence and Raman measurements with the QE65000

The scientific grade QE65000 has an excellent UV response, a wide dynamic range and up to 90% quantum efficiency, making them ideal for DOAS measurements. With an excellent signal-to-noise ratio, the QE65000 is also very well suited for low light level and demanding applications, such as fluorescence and Raman spectroscopy.

## Laser induced breakdown spectroscopy for elemental analysis with the LIBS2500+

The LIBS2500+ is a detection system for real-time qualitative measurements of elements in solids, solutions and gases. This broadband, high-resolution system provides spectral analysis across a wide 200-980 nm range (depending on the system) at a resolution of ~0.1 nm (FWHM).



## Oxygen and pH-sensing using optical sensor systems

Optical sensor systems use chemical-sensing complexes to analyse oxygen and pH. Our fluorescence based sensors analyse dissolved and gaseous oxygen pressure. Optical oxygen sensor systems are immune to environmental changes in pH, salinity and ionic strength and do not consume oxygen, allowing for continuous contact with the sample.

**All Ocean Optics products are also available as OEM modules**



### Regional Headquarters

Maybachstrasse 11  
73760 Ostfildern  
Germany  
T: +49 711 34 16 96-0  
F: +49 711 34 16 96-85

**Ocean Optics EMEA**

### Sales & Support Centre

Geograaf 24  
6921 EW Duiven  
The Netherlands  
T: +31 26 3190500  
F: +31 26 3190505

**www.oceanoptics.eu**

### Local Sales Support

United Kingdom: +44 1865 263 180  
Germany North: +49 513 697 467 05  
Germany South: +49 711 341 696 0  
France: +33 148 576 136  
Austria: +43 226 220 673

**info@oceanoptics.eu**