ENABLING

MICROSCALE

RESEARCH

Measure Hydrogen production

Unisense hydrogen and oxygen sensors for direct and real-time detection of dissolved gases in your solar energy studies

H_2 and O_2 sensors characteristics:

- Sensor for dissolved and gaseous hydrogen and oxygen
- Detection rate from below 50 nM to saturated H_2 or O_2 water
- Real-time data
- Response time in seconds
- Modifications and customizations available
- Easy calibration and linear response

Unisense microsensors are widely used in solar-fuel studies looking at development of H_2 and O_2 as a function of solar water splitting. The sensors can be mounted directly in the fuel cell by available modifications from Unisense or by home-made solutions, allowing for fast and real-time detection of e.g. H_2 production.

Our microsensors are clark-type based sensors with tip sizes from 10-500 µm. The sensors respond linearly to the partial pressure of the gases and can measure from very low range to fully saturated concentrations. The sensors are connected to our Microsensor Multimeter for robust amplification and ease-of-use.

SensorTrace Suite software allows simple two-point calibration, live data view, logging and analysis of data.

Various customizations of the H_2 sensor together with the Microsensor Multimeter