

Enviro Technology has been working as the UK partner to Eosense since 2016. The Eosense range of soil gas flux measurement products perfectly complements our ever-popular range of Los Gatos Research greenhouse gas analysers.

As the photo below shows, the eosAC autochambers and eosMX-P recirculating multiplexer are fully compatible with LGR gas analysers. The combination of these systems provides a robust and low-power solution for monitoring greenhouse gas fluxes in a variety of situations, from green roofs in urban environments to the frozen tundra of the arctic circle.



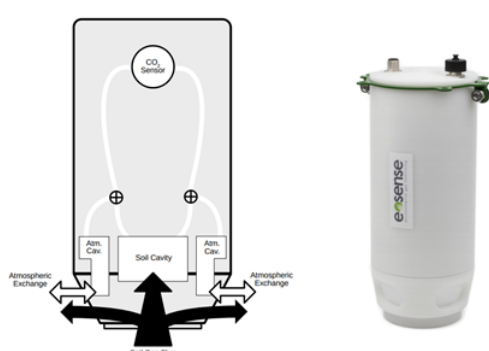
The eosAC chambers themselves are rugged, weatherproof, and suitable for long-term unattended deployment. Eosense's patented Forced Diffusion technology allows the chambers to measure gas flux rates across a special semi-permeable membrane. Peripheral soil moisture and temperature sensors provide additional data to allow fluxes to be calculated accurately and easily using the provided eosAnalyze software.

*eosAC chambers are well proven in the field, and were used in a paper that was recently published in Nature:*

<http://www.eosense.com/science/case-studies/case-study-eosac-rainforest/>



For those who want to measure CO<sub>2</sub> fluxes accurately and reliably, without the complexity and expense of a full LGR gas analyser + Eosense multiplexer and chamber system, Eosense also offer the standalone eosFD CO<sub>2</sub> flux sensor.

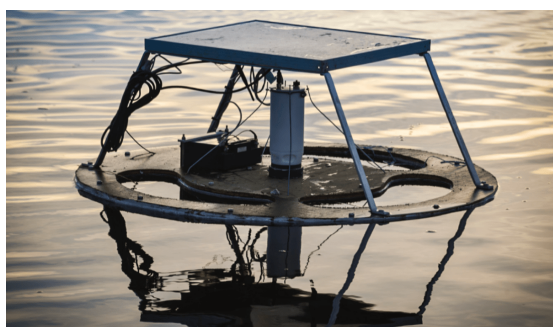


The eosFD implements Forced Diffusion technology in a small, weatherproof package which consumes an average of less than 1 watt of power. This makes the eosFD suitable for running from a solar panel, even in locations with minimal sun intensity. The small size, weather-proofing, and internal data logging also make the eosFD suitable for long-term monitoring of fluxes in harsh and inaccessible locations, and because it is a low-cost instrument, saturation monitoring of a large number of plots is more accessible than ever.

The eosFD has even been used to monitor fluxes from tree stems, and has also been floated on the surface of a lake to measure CO<sub>2</sub> exchange.

Read more about the lake CO<sub>2</sub> flux case study here:

<http://www.eosense.com/blog/lake-co2-flux-estimates/>



For researchers investigating carbon cycling in bodies of water, Eosense also offer a compact CO<sub>2</sub> concentration probe that is waterproof to a depth of 3 metres, the eosGP.

The eosGP uses a dual-channel NDIR detector to measure the concentration of CO<sub>2</sub> that diffuses from the water across an internal membrane. A low power consumption of less than 1 watt, and the ability to log data either to a data logger or directly to a computer using the Eosense software, makes the eosGP suitable for a wide variety of applications. It can easily be integrated into existing systems, or run as a standalone device.

Read about how eosGPs were used to monitor CO<sub>2</sub> concentrations in polygonal ponds in Siberia here: <http://www.eosense.com/blog/carbon-monitoring-polygonal-ponds/>

More information can be found on the soil Gas Flux Measurement pages of our website: <https://www.et.co.uk/products/scientific-research-instrumentation/soil-gas-flux-measurement/>

To enquire about any of the Eosense products within the UK contact our specialist today at:

**01453 733200 or email [sales@et.co.uk](mailto:sales@et.co.uk)**

**[www.et.co.uk](http://www.et.co.uk)**