CO_2 Flux Measurement Chamber

OVERVIEW

eco2-X is devised a sensory system to effectively measure the flux of CO_2 from the soil using an NDIR sensor. The system is fully automated and collect data in a real time constant manner over a long period of time and will link all the nods deployed over a land through NB IOT technology. To precise CO_2 assessment air from soil enters to device, an internal little pump is activated for a uniform flow of carbon dioxide and air is sent to the internal sensors. The data is continuously sent to the web and the user will be able to monitor and analyze the data online.

CHAMBER MEASUREMENTS TECHNOLOGY

Measuring, maintaining and analyzing recorded data is possible in two ways:

A- Single mode: when only one device is used by the user, if there is no access to the Internet, the data is stored in an internal data logger, and if there is access to the Internet, the data is stored under the web and connected to the central network.

B- Multiple mode: using NB-IOT (narrow band IOT) technology to establish a network between the sensors and a centralized device. In this case, only the central device connects to the Internet network, and other devices up to a radius of ten kilometers connect to the central device without the need for the Internet, and the information of all devices is sent to the central server.

BENEFIT AND FEATURES

- ✓ On line data monitoring on web
- ✓ Low power (solar-battery rechargeable system, user specified)
- ✓ The possibility of setting the energy consumption of the device by the user, based on the measurement intervals
- ✓ No external moving parts
- ✓ Saving data in internal data logger
- ✓ Working in harsh situation (zero degrees)
- ✓ Long terms simultaneous measurements of humidity, temperature and carbon dioxide
- ✓ Accurate
- ✓ Waterproof
- ✓ Durable
- ✓ High performance NDVIR sensor
- ✓ User friendly Flux analysis web software

SPECIFICATION

Dimension	15*20 cm
Operating temperature	-20 to +40
Operating power	
Operating voltage	3.6 VDC
Accuracy	± 50 ppm
Measurement Rate	1 min to … (user specified)
Calibration ranges (ppm)	0 to 10000 ppm

CONTACT:+989125347065

eco2-x.com

Info@eco2-x.com