

PRI-8400 Underground Online Dilution Profile Continuous Measurement System



Soil respiration is one of the largest and most important carbon fluxes in terrestrial ecosystems. Surface flux research can not discover entire soil biochemistry processes. Undergrand gas reaserch will help us understand better on soil gas migration and soil biochemistry processes. PRI-8400 is a newly designed automated underground soil gas profile pretreatmet system, it's easy to connect with low measurement range analyzers, suitable for long term multilevel soil flux measurements.

Standard PRI-8400 includes 6 sampling channels with simi-permeable membrane gas exchange module, and online dilution module, 3 channels calibration module as option. Innovative simi-permeable membrane design can minimize sampling error caused by soil heterogeneity. Scientific and sophisticated gas exchange module also minimizes sampling interference within the soil. As option, the patented dual circulation and CO₂ pretreatment module for minimal interference of subsequent level soil, enables scientists to obtain more accurate data.

PRI-8400 is a rugged, weatherproof mechanical design intergated with online dilution module, which can be used for various soil research. The system can be widely used in the fields of ecology, agriculture, forestry, fertilizer, permafrost, plant rhizosphere physiology and ecology.

Key Feature

Innovative membrane gas exchange technology
large dynamic online dilution

No disturb on soil internal gas circulation metabolism
Continuous sampling and minimal interference

Specifications

Measurement Range (CO ₂ , stanard; N ₂ O, NH ₃ , CH ₄ options)	0~1%, 0~3%, 0~5%, 0~10%, 0~30%, 0~100% (optional)
Concentration Uncertainty	>2%
H ₂ O Range	0~100%
Interval	1 s
Rise-Fall(10-90%, 90-10%)	10 s
Channels	6 (standard), customizable
Calibration Channels	3
Sampling Tube	1 m(standard) for each channel, customizable
Sampling Temp.	-10 tp 50 °C
Sampling Flowrate	50 mL/min@760 Torr
Sampling Pressure	700 to1000 Torr (93 to133 kPa)
Operating Temp.	-10 to 45°C; -30 to 45°C
Dimensions	43.2 x 17.8 x 44.5 cm
Weight	18 kg
Power Requirements	50 W, 110-220 VAC, 50/60 Hz

Note: All specifications are believed to be correct at the time of publication, PRI-ECO does not accept liability for any errors or omissions. Due to continuous product development always check latest published specification.

Manufacturer: PRI-ECO

PRI-ECO COMPANY LIMITED

W www.pri-eco.com E info@pri-eco.com T +86 13501072966
Building 98-1, Zizaixiangshan, Hanheyuan Road, HaiDian District, 100093, Beijing, China