Simplified Eddy Covariance Measurements

Design Your Own Package

Using the new LI-COR gas analyzers for eddy covariance can save money as you do not need a data logger or environmentally controlled housing. Data is stored in the LI-7550 Analyzer Interface Unit which is included with the LI-7500A Open Path or LI-7200 Enclosed CO₂/H₂O Analyzers. The LI-7700 Open Path CH₄ Analyzer directly outputs data through Ethernet to a computer or other device or it can be connected to the LI-7550 as well. The rugged design makes these analyzers the best choice for use in remote areas since they require minimal power (10 to 35W), have low cost of ownership, and operate with little user involvement.

Step 1: Choose CO₂/H₂O Analyzer



LI-7500A Open Path CO₂/H₂O Analyzer

The LI-7500A is our newest open path $\rm CO_2/H_2O$ analyzer, built upon the proven platform of the LI-7500. It offers the lowest power option.



LI-7200FM Enclosed CO₂/H₂O Analyzer with Flow Module

The LI-7200 is a compact, enclosed analyzer designed to operate in harsh conditions with impressively low power consumption. Includes flow module which provides a precisely controlled airflow through the optical path.



Step 2 (Optional): Add CH₄ Analyzer



LI-7700 Open Path CH₄ Analyzer

The LI-7700 is a low power, high speed, high precision, self-cleaning methane analyzer built for the field.

If you choose to add the LI-7700 Open Path $\mathrm{CH_4}$ Analyzer to your Eddy Covariance Package, you can save additional money by purchasing the LI-7700 in a package with one of the $\mathrm{CO_2/H_2O}$ analyzers.

Continue to Step 3



Step 3: Add Sonic Anemometer

Although LI-COR analyzers are designed to work with a variety of sonic anemometers, the following Gill 3-Axis Ultrasonic Anemometers are available directly from LI-COR. Each provides sonic temperature, and U, V, and W vector outputs.

GILL-WM Gill WindMaster™ Sonic Anemometer



- Output rate: 20Hz
- Wind speed: 0-45 m/s

The LI-COR Solution includes the WindMaster™ (calibrated), case, sonic mount, serial communications cable, and analogue outputs.

GILL-WMP Gill WindMaster™ Pro Sonic Anemometer



- Output rate: 32Hz
- Wind speed: 0-65 m/s

The LI-COR Solution includes the WindMaster™ Pro (calibrated), case, sonic mount, serial communications cable, and analogue outputs.

GILL-R3 Gill R3-50 Sonic Anemometer



- Output rate: 50Hz
- Wind speed: 0-45 m/s

The LI-COR Solution includes the R3-50 (calibrated), case, sonic mount, and PCIA unit.



Step 4: Add a Cable

Add a cable to directly connect the Gill WindMaster™ or WindMaster™ Pro Sonic Anemometer to the LI-7700 and/or LI-7550 Analyzer Interface Unit of the LI-7500A or LI-7200.

Cable Part Number	Cable Description
9975-033	Connect GILL-WM or GILL-WMP to the LI-7550 Analyzer Interface Unit of the LI-7500A or
	LI-7200 CO ₂ /H ₂ O Analyzer
9977-062	Connect GILL-WMP to the LI-7700 CH ₄ Analyzer
9975-034	Connect GILL-WM or GILL-WMP to both the LI-7550 Analyzer Interface Unit of the LI-7500A or
	LI-7200 CO ₂ /H ₂ O Analyzer and to the LI-7700 CH ₄ Analyzer

If you already have a Campbell® Scientific CSAT-3 sonic anemometer, you can choose one of the cables below to directly connect it to the LI-7700 and/or LI-7550 Analyzer Interface Unit of the LI-7500A or LI-7200.

Cable Part Number	Cable Description
9975-035	Connect CSAT-3 to the LI-7550 Analyzer Interface Unit of the LI-7500A or
	LI-7200 CO ₂ /H ₂ O Analyzer
9977-063	Connect CSAT-3 to the LI-7700 CH ₄ Analyzer
9975-036	Connect CSAT-3 to both the LI-7550 Analyzer Interface Unit of the LI-7500A or LI-7200
	CO ₂ /H ₂ O Analyzer and to the LI-7700 CH ₄ Analyzer

