Questions to consider
when evaluating gas analyzers:

Does the gas analyzer have proven field performance?

Why is This Important?	The LI-COR Advantage
Proven gas analyzers give you confidence that the eddy covariance system will meet your expectations.	**LI-COR CO_2/H_2O analyzers are used in CO_2 flux towers worldwide, many having been deployed for 15+ years.** Flux networks such as FluxNet, AmeriFlux, NEON, CERN, and ICOS rely on LI-COR analyzers, often after extensive tests and comparisons.

Is the gas analyzer versatile enough to work in different site conditions and for different monitoring objectives?

Why is This Important?	The LI-COR Advantage
Each site presents unique conditions. A gas analyzer should be able to work in various eddy covariance setups so that all of the important wind directions at a study site are covered by measurements and—at the same time—the analyzer does not distort natural airflow in the anemometer. This flexible, robust approach is difficult or impossible when the analyzer is built into the anemometer.	**LI-COR analyzers can be positioned to maximize data coverage and quality by minimizing flow distortion and optimizing sensor separation.** They are compatible with both omnidirectional and C-clamp style sonic anemometers, and also perform well in contaminated or dusty sites. Our analyzers are deployed in diverse ecosystems from the equatorial jungles of Brazil to permafrost wetlands near the Arctic Ocean, and from the rainforests of Vietnam to Israeli deserts.

Does the gas analyzer need a separate data logger?

Why is This Important?	The LI-COR Advantage
Eddy covariance systems record lots of data, including measurements, diagnostic information, and supporting data.	**Gas analyzer and sonic anemometer data are recorded in compressed files without requiring a separate data logger or system controller.** Data are processed on-site by the SMARTFlux™ System using sophisticated EddyPro® Software. Access fully corrected fluxes and raw data in real time using wireless communication and web-based FluxSuite™ Software.

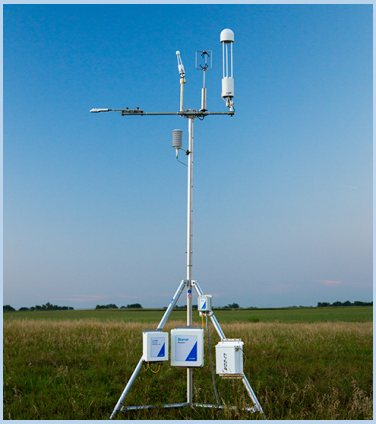
LI-COR®

1-402-467-3576
www.licor.com/env

What are the power requirements?

Why is This Important?	The LI-COR Advantage
Providing main line power to field sites is difficult and costly. Fuel to run generators can add thousands of dollars to annual operating expenses. Low power requirements ensure analyzers can operate with a solar power supply.	**Nominal power requirements for LI-COR eddy covariance analyzers:** • LI-7700 Open Path CH_4 Analyzer: 8 Watts • LI-7500RS Open Path CO_2/H_2O Analyzer: 12 Watts • LI-7200RS Enclosed CO_2/H_2O Analyzer: 12 Watts • 7200-101 Flow Module: 16 Watts • No Additional pumps or gases are needed  Actual power requirements vary based on temperature, instrument settings, and other factors.

Does the gas analyzer require protection from weather or additional infrastructure?

Why is This Important?	The LI-COR Advantage
Weatherized analyzers should withstand wide temperature variations, rain, and snow without failure.	**LI-COR eddy covariance analyzers are weatherized to resist water penetration and operate outdoors over wide temperature and humidity ranges.** This reduces operating costs by eliminating the need to protect the instruments during inclement weather and build structures to enclose the sensors. 

Can the gas analyzer be cleaned in the field?

Why is This Important?	The LI-COR Advantage
Field serviceable analyzers save money, reduce downtime, and provide more complete, higher-quality data sets.	**LI-COR analyzers resist contamination and can be cleaned on the tower without requiring factory calibration.** With improved optics, the LI-7500RS and LI-7200RS can go for weeks without cleaning. Remote monitoring with optional FluxSuite™ Software also minimizes the need for field visits. The LI-7700 automatically cleans the lower mirror according to your settings. 

982-13564
01/2016 Rev 2