

Sonic Anemometers

Options to Fit Your Unique Research



Wind speed measurements are an integral component of the eddy covariance method. Research goals may require a sonic anemometer with specific geometry, heating options, or better operation in wet conditions. Research may also be constrained by available budgets.

LI-COR eddy covariance systems are strategically designed to give you the flexibility to integrate with a variety of sonic anemometers to fit your exact research needs, including the latest digital, heated, and multipath options.

A patented time stamp synchronization protocol integrates data from the anemometer with the gas analyzer data. LI-COR eddy covariance systems process your combined data sets using EddyPro® running on the SmartFlux® System to deliver on-site, real-time flux results.

To learn more about the sonic anemometer options available to you visit licor.com/sonics.

Key Features

- Compatible with 10+ sonic anemometer options to fit your research needs and budget
- Omnidirectional measurements provide reliable data from nearly all wind directions
- Minimize the effect of ice and snow on your data with optional heating elements
- Optional redundant transducers provide three independent air flow measurements
- SmartFlux synchronizes instrument clocks using GPS and PTP for precise data synchronization within and across sites

Sonic Anemometers

Available from LI-COR

The following sonic anemometers are offered directly from LI-COR. Data cables, power cables, and mounting hardware are available for tripod or tower configurations.

For additional details and specifications on compatible sonic anemometers, visit licor.com/sonics.

Gill WindMaster™

3-axis ultrasonic anemometer with sampling rate of 20 measurements per second and a wind speed range of 0 to 45 m/s.

Gill WindMaster™ Pro

3-axis ultrasonic anemometer with a sampling rate of 32 measurements per second and a wind speed range of 0 to 65 m/s.

RM Young 81000RE

3-axis ultrasonic anemometer with extended mast that separates the transducer array from the instrument body and wind-tunnel calibrated sensors.

Metek uSonic-3 Cage Multi-Path

Optimized for omnidirectional measurements with minimal flow distortion design of sensor head and sonic transducers. Includes heating elements and redundant transducers.

Metek uSonic-3 Class A Multi-Path

Performs three independent measurements of the 3D air flow quasi-simultaneously by arranging each transmitter to three opposite receivers. Also includes heating elements.

Digital Sonic Anemometer Integration

LI-COR eddy covariance systems are compatible with the digital signals and diagnostics from the following sonic anemometers:

Campbell® Scientific

- CSI CSAT3
- CSI CSAT3B

Gill Instruments

- Gill HS-50
- Gill HS-100
- Gill R3-50

RM Young

- RM Young 81000
- RM Young 81000V
- RM Young 81000VRE