

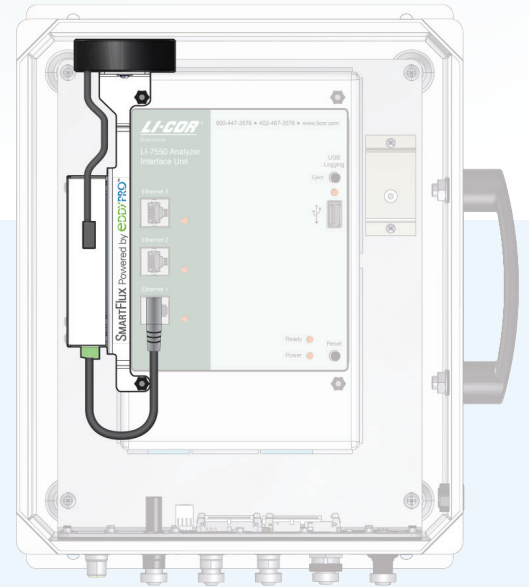
The SMARTFlux™ System Powered by **EDDYPRO**

Fully Corrected Flux Results, On Site in Real Time

The SMARTFlux™ System computes fully corrected eddy covariance fluxes with EddyPro® software in real time at the measurement site. The SMARTFlux System is a field-ready add-on that installs inside the LI-7550 Analyzer Interface Unit to compute eddy covariance results directly from any LI-7500A or LI-7200 flux system.

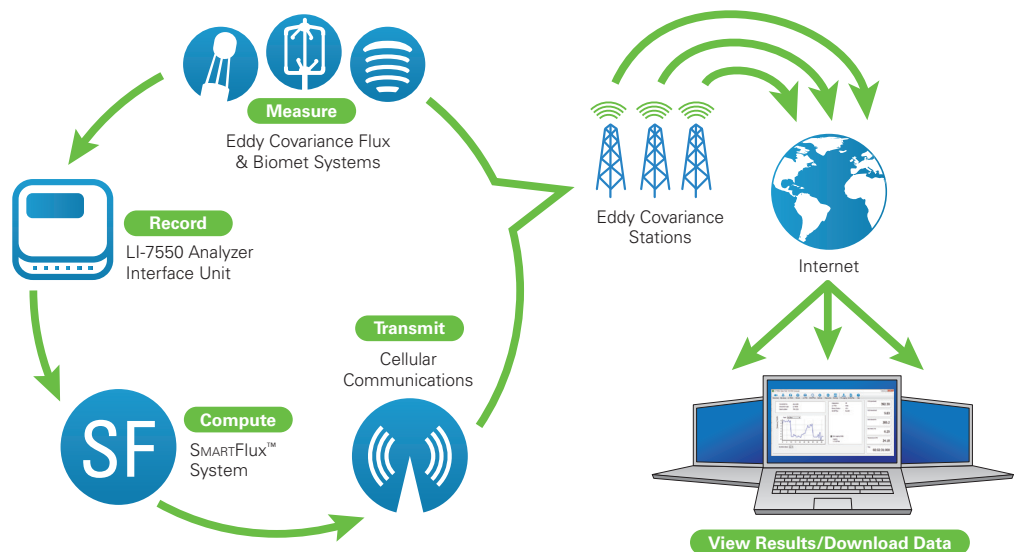
SMARTFlux provides:

- Automated processing of raw data at the research site using EddyPro software
- Fully corrected fluxes of sensible heat, latent heat, evapotranspiration, CO₂, H₂O, and CH₄ at the site and in real time
- Advanced, site-specific raw data processing (*in situ* spectral correction, planar fit, etc.)
- GPS time synchronization prevents clock drift and keeps instrument clocks in sync within and across sites



Upgrade your older LI-7500 to include the SMARTFlux System using the LI-7500A Upgrade Kit

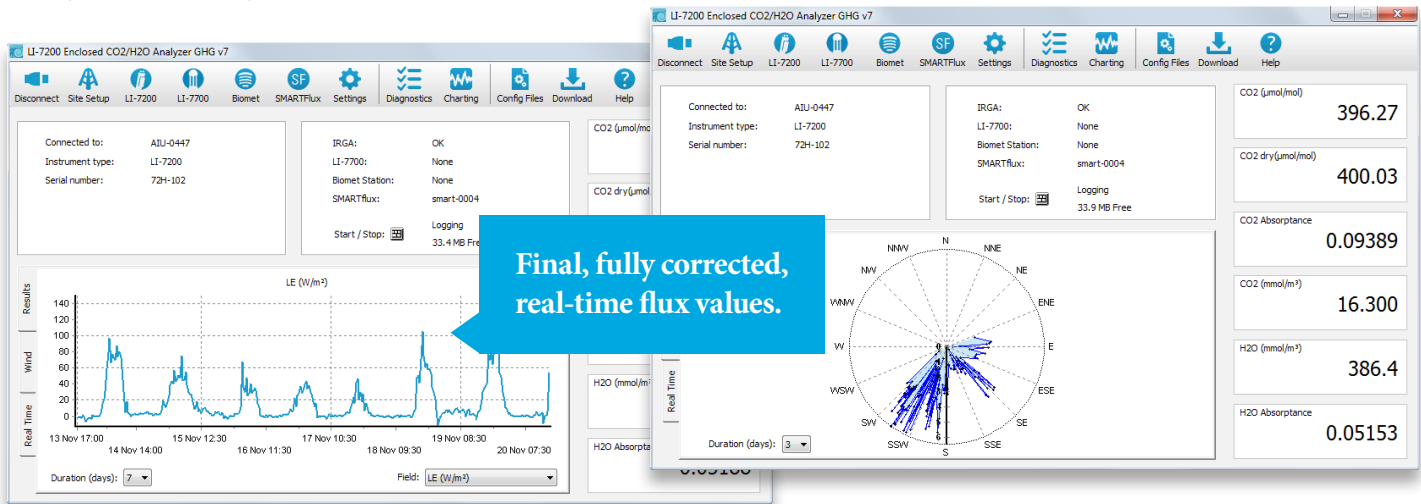
With the SMARTFlux system you can view computed fluxes in real time, including sensible heat flux (H), latent heat flux (LE), evapotranspiration (ET), carbon dioxide flux (F_c), methane flux (CH₄; LI-7700 required), and ambient concentrations of (CO₂, H₂O, and CH₄ number density); and a wind rose plot showing the predominant wind direction. This allows you to quickly recognize and respond to any system performance issues.



Why SMARTFlux?

SMARTFlux is an autonomous system that collects data from the LI-7550 and processes it using EddyPro, incorporating corrections such as coordinate rotation, frequency response corrections, and synchronization of variables from all instruments. SMARTFlux also provides a variety of outputs including random error estimates for fluxes, spectra and cospectra, footprint estimates, and daily summary files that are well suited for system diagnostics. The corrections implemented in SMARTFlux enable optimal computation of fluxes to provide the best eddy covariance flux measurements of any commercial system available.

Did you know LI-COR offers cellular communication options?
www.licor.com/ec-communication



Specifications

The SMARTFlux System (p/n 7550-200):

Size: 213.4 mm (8.4 inches) x 95.25 mm (3.75 inches) x 24 mm (0.94 inches) (LxWxH)
Weight: Including GPS module: 205 grams (0.45 lb.)
Input Voltage: 10-30VDC, 2.1W, including GPS module
Input Current: 175 mA @ 12VDC, Including GPS module
Operating Temperature: -40 to +50 °C
Relative Humidity: 0-95% (non-condensing)
Inputs/Outputs: 10/100 Ethernet
GPS I/O Connector: Power (5.0V) plus RS-232 (19200 kbits/sec) and TTL input for GPS timing pulse

Garmin 18x GPS Receiver:

Size: 61 mm (2.4 inches) diameter and 19.5 mm (0.77 inches) height
Weight: 165 g (5.8 oz)
Input Voltage: 4.0 – 5.5 VDC
Input Current: 100 mA @ 5.0 VDC
GPS Receiver Sensitivity: -185 dBW minimum
Operating Temperature: -25 to 85 °C (Swissbit microSD; 8 GB) -40 to 85 °C (Delkin microSD; 8 or 16 GB)
Storage Temperature: -40 °C to +90 °C (-40 °F to +194 °F)



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