

Plant Physiology

www.campbellsci.com/plant-physiology

Benefits of Our Systems

1. Bowen ratio, eddy covariance, TDLAS, and automated weather stations available.
2. Fluxes can be computed in real time, or the raw data archived for later analysis.
3. Systems operate reliably in harsh environments.
4. Batteries and solar panels allow long-term, remote operation without AC power (for some systems).
5. PC software collects and processes time-series data.
6. Compatible with a variety of micrometeorological sensors—configure a system to meet your needs.
7. Communications options include storage modules,

spread spectrum radios, and short haul modems. On-site or remote data retrieval is also available.



Campbell Scientific manufactures research-grade instrumentation for a variety of micrometeorological applications. Our systems include Bowen ratio and eddy covariance flux measurement systems, trace gas analyzers, and automated weather stations. Designed for field use, these systems provide reliable, accurate measurements for applications such as:

- Surface/atmosphere interactions
- Carbon, energy, & water balance
- Plant respiration research
- Air dispersion modeling
- Atmospheric stability
- Global climate change
- Agricultural research
- Ecosystem research

Weather/Evapotranspiration Measurements

Our weather stations provide long-term, stand-alone monitoring of meteorological parameters for all types of agricultural research applications. Programmable data-loggers allow multiple options for station configuration, measurement and output intervals, and data retrieval. Almost any meteorological sensor can be used, including: wind speed and direction, solar radiation, temperature (air, water, soil), relative humidity, dew point, precipitation, leaf wetness, and barometric pressure. Wind vector, wet bulb, histogram, and sample on maxima or minima are standard in the datalogger instruction sets. Data are typically viewed and stored in the units of your choice (e.g., wind speed in mph, $m s^{-1}$, knots). Pre-programmed stations calculate potential evapotranspiration using the Penman-Monteith equation; other evapotranspiration algorithms can be entered by the user.



CR5000



CR10X

