Automated Station

For commercial agriculture, irrigation scheduling, and meteorological applications

Overview

Campbell Scientific’s ET107 is an automated system designed for commercial agriculture and irrigation scheduling. The station calculates potential evapotranspiration (ET0), which is the amount of water lost from the soil due to evaporation and plant transpiration. Calculating a crop’s evapotranspiration rate can aid in the development of an irrigation schedule that provides sufficient water for the crops without overwatering.

Benefits and Features

- CR1000-based system
- Commonly used suite of sensors that supports many applications
- Watertight enclosure that protects electronics and enhances long-term reliability
- Low power consumption
- Slim, vertical profile for a more attractive station
- Simple, integrated design for faster installation

Measurements

- Wind speed
- Wind direction
- Air temperature
- Relative humidity
- Precipitation
- Solar radiation—sun plus sky radiation

More info: 435.227.9120

www.campbellsci.com/et107
Customizations
The ET107 can be customized to fit a project’s needs, while retaining turn-key functionality. Components that can be added to the ET107 are listed below.

Sensors
Cable termination option -C allows the following soil sensors to be connected to the ET107:

- 107 Soil Temperature Probe (-35° to +50°C)
- 108 Soil Temperature Probe (-5° to +95°C)
- CS616 Soil Water Content Reflectometer
- CS650 30 cm Soil Water Content Reflectometer Plus
- CS655 12 cm Soil Water Content Reflectometer Plus
- Other sensors may be available upon request. Contact a Campbell Scientific representative if interested.

Communications
Wi-Fi and Ethernet interfaces, spread-spectrum radios, digital-cellular phones, and voice-synthesized modems may be used for some applications; contact Campbell Scientific for more information.

Power
The PS24 power supply is recommended when using a spread-spectrum radio or cellular phone with a solar-powered ET107 station. The PS24 includes its own 10-inch-by-12-inch environmental enclosure that is mounted to the ET107 pole via the 18520 hanger mounting kit.

*Older models of the ET107 station used an R.M. Young 6-Plate Radiation Shield to house the air temperature and relative humidity sensor. The adapter for the R.M. Young radiation shield is no longer available. If a replacement sensor is needed for an older station, order an HMP60-ET and reuse the old adapter. The MetSpec radiation shield has wingnuts on the bottom of it.