

# **TurfWeather**

**Automated Weather Station for OEMs** 



# Automated Station for OEMs

In turf grass market

#### Measurements

- Wind speed
- Wind direction
- Air temperature
- Relative humidity

- Rainfall
- Solar radiation
- Barometric pressure

#### Overview

Campbell Scientific's TurfWeather® is an automated weather station designed for OEMs in the turf grass market. It consists of meteorological sensors, a solar panel, and a protective case that houses the datalogger/transmitter and rechargeable battery. The case and solar panel mount to a pole with a 1.25-inch-to-2-inch outer diameter (optional or user-supplied).

The TurfWeather's datalogger measures the sensors, then stores and processes the data. The datalogger contains an internal spread spectrum radio for transmitting data to a PC. Campbell Scientific ships an RF401A-series spread spectrum radio with the TurfWeather. This radio connects to the PC, and receives transmissions from the weather station. With typical line-of-sight conditions and using a ¼ wave antenna, the TurfWeather can transmit data over distances of half a mile.

# **Benefits and Features**

- Preprogrammed according to each OEM's needs—whether the OEM requires simple meteorological data or complex data processing such as ETo calculations
- **)** Low power consumption

- Watertight enclosure that protects electronics and enhances long-term reliability
- Transmits data using spread spectrum radios
- > Simple, integrated design for faster installation



# **Standard Components**

- 1 CR206X Datalogger with 915 MHz Radio
- 2 0.8 Ah lead-acid battery
- 3 Solar radiation sensor
- 4 Air temperature and relative humidity probe
- 5 Tipping bucket rain gage
- 6 Wind direction sensor
- Wind speed sensor
- 8 1.25 inch to 2 inch outer diameter pole
- 9 5 W solar panel
- 10 Protective case

# **Customizations**

## **Programming**

The TurfWeather is preprogrammed according to each OEM's needs—whether the OEM requires simple meteorological data or complex data processing such as ETo calculations.

# Datalogger/Spread Spectrum Radio

- CR211X Datalogger with 922 MHz Spread-Spectrum Radio
- CR216X Datalogger with 2.4 GHz Spread-Spectrum Radio

## Accessory Telemetry and Power Kit

The ATP100 kit includes a 10-inch-by-12-inch enclosure that houses a 7 Ah rechargeable battery and NL240 Wi-Fi interface. The enclosure is typically mounted to a pole. Several antenna options are offered. The kit also may be purchased without the NL240 for applications requiring other communication options.



ATP100 Accessory Telemetry and Power Kit



#### Mounts

- CM375 30 foot Portable Mast
- > CM300 23 inch Mounting Pole
- CM305 47 inch Mounting Pole
- CM310 56 inch Mounting Pole

#### Sensors

High accuracy (0.01 inch per tip), external tipping bucket also available; contact Campbell Scientific for more information.

The TurfWeather is a commercial-grade station. For turf grass applications that require research-grade performance or more durable sensors, Campbell Scientific offers the ET107 Evapotranspiration Station.

