



Reliable Weather Monitoring

Research-Grade Mesonet Station

Standard Measurements

- Wind speed (2 m and 10 m)
- Wind direction (2 m and 10 m)
- Air temperature (2 m)
- Relative humidity (2 m)
- Barometric pressure
- Precipitation
- Solar radiation
- Soil water content

Overview

The MesoPRO™ is a highly accurate, durable, research-grade meteorological monitoring station, designed for a wide-variety of demanding environmental applications. This 10-meter tower station is suitable for long-term installations common in large networks like mesonets. Remote monitoring and data collection is implemented via an industrial 4G LTE cellular network modem.

This system implements field-proven sensors that provide accurate measurements required for the data products needed by mesonet stakeholders. The sensors are selected for an optimal balance between accuracy, durability, and performance to get the best data, while reducing maintenance and operational overhead. The MesoPRO's meteorological measurements can be used to calculate evapotranspiration, growing-degree days, wind chill, dew point, and other weather-related parameters.

Benefits and Features

- › Obtain defensible data with high-accuracy instruments
- › Deploy system remotely for unattended long-term monitoring
- › Low-power design
- › Reduce maintenance overhead with durable system components
- › Adapt to diverse or changing measurement needs with a tower-based solution
- › Connect remotely with 4G LTE cellular network—two-way satellite Internet and many other communications options supported
- › Customize system for specific application needs

More info: 435.227.9120

www.campbellsci.com/mesopro



Components

- 1 CR6-WIFI Measurement and Control Datalogger with integrated Wi-Fi modem
- 2 PS84-SC-SR-TM Rechargeable Power Supply
- 3 SP50 50 W Solar Panel
- 4 05108 RM Young Wind Monitor
- 5 17953 Nu-Rail Fitting
- 6 TB4 Tipping Bucket with CM300 Pedestal Mount
- 7 260-953 Alter-type Rain-Gage Wind Screen
- 8 CM206 6 ft crossarm
- 9 EE181 Temperature and Relative Humidity Probe and RAD10E 10-Plate Radiation Shield
- 10 CM204 4 ft Crossarm
- 11 CS100 Barometric Pressure Sensor
- 12 RV50 Cellular Modem and mounting bracket
- 13 ENC12/14 Enclosure, 12 inch by 14 inch
- 14 CS300 Solar Radiation Sensor with 18356 Leveling Base and CM225 Solar Radiation Mount
- 15 UT30 Tower 30 ft Tower with guy kit, grounding kit, and base
- 16 CS655 Soil Water Content Reflectometers (quantity 3)

Some system sensors and components may not be available in all parts of the world. Contact your regional Campbell Scientific representative for details.

Customizations

You can order the MesoPRO™ with the parts shown above or as a complete pre-wired, pre-programmed, pre-configured system.

This system is also fully-customizable. You can add sensors, measurement peripherals, and communications devices to meet the needs of your specific application. Contact a Campbell Scientific sales engineer to design your custom solution.

