



## Reliable Weather Monitoring

## **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 such as mesonets. Remote monitoring and data collection are implemented via an industrial 4G LTE cellular network modem.

This system implements field-proven sensors, which provide accurate measurements required for the data products needed by mesonet stakeholders. The sensors selected are an optimal balance between accuracy, durability, and performance to obtain the best data while reducing maintenance and operational overhead. Meteorological

variables measured can be used to calculate many weatherrelated parameters such as evapotranspiration, growingdegree days, wind chill, dew point, and other weatherrelated parameters.

The MesoPRO can be ordered with the parts shown above or as a complete prewired, preprogrammed, preconfigured system for an additional cost.

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

## **Benefits and Features**

- Defensible data obtainable with high-accuracy instruments
- Remote system deployment for long-term monitoring with low-power system design
- Durable system components for reduced maintenance overhead
- Adaptable to diverse or changing measurement needs with tower-based solution
- ▶ Remote connection with 4G LTE cellular network; many other communications options supported, including twoway satellite Internet
- Customizable system for specific application needs

## **Technical Description**

The PRO-series stations offer new options for those looking to deploy a complete weather station solution for many research, operational, and meteorological applications. All of these stations are designed to be research-grade, although there are some differences that may affect your selection. The MesoPRO and MetPRO stations are built using the best

blend of components for accuracy, durability, and reliability. The WxPRO uses quality instruments at a lower price for researchers on a tight budget.



The MesoPRO is intended for applications where having a 30 ft (10 m) tower is desired for permanence, as well as the opportunity to make measurements at many different heights. Common users of this configuration are operators of large networks (such as mesonets), as well as researchers that need a permanent solution with the flexibility to add or change instruments in the future.

The MetPRO uses the same high-quality instruments as the MesoPRO, but offers the solution with a convenient 10 ft (3 m) tripod rather than a tower for mounting hardware. The tripod adds mobility for shorter-term research projects and

offers an easier method to install a full meteorological

The WxPRO is an entry-level weather station solution that has many of the features of the higher-end systems at a lower price point. It is ideal for budget-conscious researchers who need confidence in their data from the use of quality instruments.

Specifications for individual instruments on the stations can be viewed on the product page for each component. If you have any questions about selecting a system, feel free to ask an expert by clicking the Ask a Question button.

