

MeteoPRO

WMO-Compliant Automated Weather Station (AWS) Suitable for GBON Applications



WMO-Compliant AWS

Suitable for GBON applications

Overview

The MeteoPRO™ is a complete hardware solution for so-called Small Island Developing States (SIDS) and Least Developed Countries (LDC) weather networks seeking Systematic Observations Financing Facility (SOFF) funds to deliver high-quality data through the World Meteorological Organization (WMO) Information System 2.0 (WIS 2.0) to the WMO and other stakeholders

Campbell Scientific's WMO-compliant, basic automated weather station (AWS) is designed for National Meteorological and Hydrological Service (NMHS) organizations to meet minimum conformance standards for Global Basic Observing Networks (GBON) requirements. Required measurements include surface wind, air temperature, relative humidity, precipitation, atmospheric pressure, and snow depth where applicable.

This system implements field-proven sensors, which provide accurate measurements required for the data products needed by NMHS stakeholders. The sensors selected are an optimal

balance between accuracy, durability, and performance to obtain the best data while reducing maintenance and operational overhead.

Campbell Scientific solutions empower NMHS organizations to make informed, data-driven decisions and take decisive action in the face of increasingly frequent extreme weather events. Measured meteorological variables can also be used to calculate many weather-related parameters, including evapotranspiration, growing-degree days, wind chill, and dew point.

The MeteoPRO station can be ordered with the components shown or as a complete prewired, preprogrammed, and preconfigured system. In addition, it is fully customizable and upgradeable. To meet the needs of a specific application, you can easily add sensors, measurement peripherals, and communications devices

Benefits and Features

- GBON ready with WIS 2.0 to meet the WMO Unified Data Policy
- Defensible data obtainable with high-accuracy instruments
- Field-tested, reliable equipment for durability in extreme environments
- Remote system deployment and low-power system design for long-term monitoring
- Durable and modular system components for reduced maintenance overhead and capacity building
- Upgradeable for adaptation to diverse or changing measurement needs



- Remote connection with 4G LTE cellular network, as well as many other supported communications options, including
- two-way satellite internet
- Barometric pressure measurements using Druck DPS8100

Detailed Description

Campbell Scientific PRO-series AWS consist of a robust hardware platform used as permanent installations for NMHS organizations and mesonets serving a diverse set of stakeholders.

Campbell Scientific AWS solutions feature a simple, open platform that is long-lasting and durable, designed to help organizations alleviate operational challenges such as inadequate capacity building, limited budgets, and environmental complications.

Systems and sensors are vetted by weather networks globally and return high-quality data suitable for numerical weather prediction, early warning systems, and climate science.

- The MeteoPRO solution is Campbell Scientific's WMOcompliant AWS that includes a select range of environmental measurements required under GBON specifications.
- The ClimaPRO solution is Campbell Scientific's WMOcompliant AWS that offers a comprehensive range of environmental measurements most commonly used in WMO-compliant weather station and climate applications.

Campbell Scientific systems represent a tremendous lifetime value proposition as a sensor-agnostic, future-proof, and openplatform solution—ideal for both modernizing legacy AWS networks and implementing new stations.

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.

