



SWx100
Smart Weather Station



Reliable Weather Monitoring

Complete, Economical Weather Station

Measurements

- Wind speed
- Wind direction
- Air temperature
- Relative humidity
- Barometric pressure
- Liquid Precipitation
- Solar radiation

Overview

Campbell Scientific's SWx100 is a rugged weather station that provides quality measurements with system customization and flexibility built at an economical price. This smart weather station can be adapted to specific needs and critical measurement requirements.

Designed for users with a budget, this solar powered self-assembled station comes together easily and is capable of providing all the me-

teorological measurements of an environmental monitoring station such as wind speed and direction, air temperature, relative humidity, precipitation and other general weather parameters. Calculated values such as wind chill, heat index, and dew point are also included.

Our freeware software, Short Cut, allows you to reprogram the system, tailoring it to fit your application.

Benefits and Features

- › Solar-powered and battery-backed Campbell Scientific CR200X datalogger
- › Low power draw combined with battery backed SRAM allows for accurate measurements and data reliability even during extended low solar recharge events
- › Complies with ModBus and PakBus protocols
- › Accurate sensors with a proven history and reliable long-term consistent measurements
- › Default configuration allows walk-up direct PC data retrieval connection and collection
- › Customizable telemetry: TCP/IP: Wi-Fi or wired, cellular, RF radio or satellite can be easily added
- › Easy to setup and portable
- › Station flexibility allows for alternative sensor selection
- › Free support

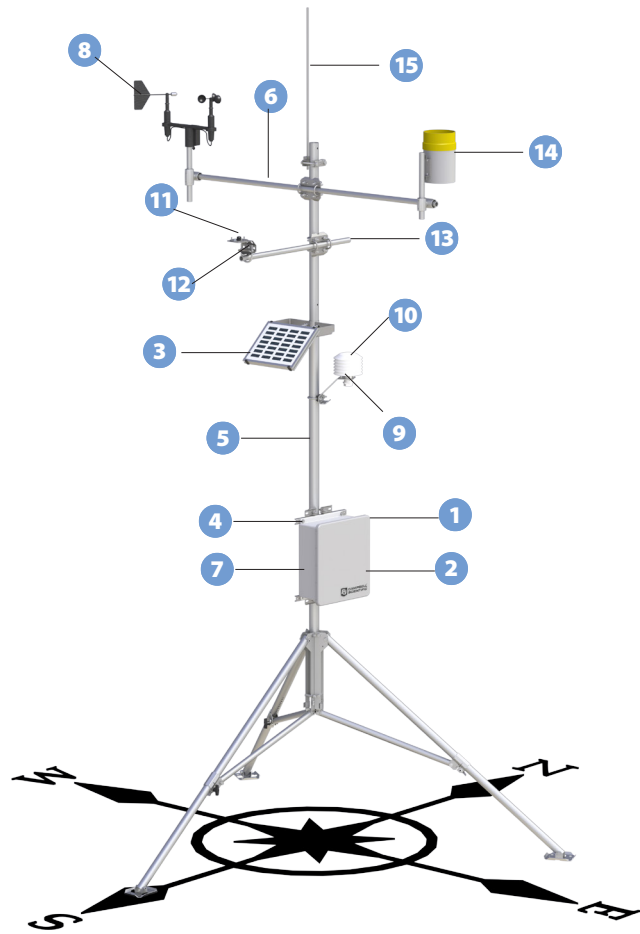
More info: 435.227.9120

www.campbellsci.com/swx100



Components

- 1 CR200X-Series Datalogger
- 2 12 Vdc, 7 Ah Rechargeable Battery
- 3 SP5 5 W Solar Panel
- 4 ENC10/12 Enclosure, 10-inch-by-12 inch
- 5 CM106B 7 to 10ft Galvanized Steel Tubing Tripod
- 6 CM204 4 ft Crossarm with Bracket
- 7 CS100 Barometric Pressure Sensor
- 8 03002 RM Young Wind Sentry Set
- 9 CS215 Temperature and Relative Humidity Probe
- 10 41303-5A 6-Plate Radiation Shield
- 11 CS300 Solar Radiation Pyranometer with 18356 Leveling Base
- 12 CM225 Solar Sensor Mounting Stand
- 13 CM202 2 ft Mounting Crossarm
- 14 TE525 Tipping Bucket Rain Gage and 12-inch pipe
- 15 Lightning Rod and Grounding Rod



For siting information, see Weather Station Siting and Installation Tools (App. Note 4-S) at www.campbellsci.com/app-notes or contact Campbell Scientific.

Customizations

The SWx100 weather station is completely customizable, allowing you to configure the station to your projects specifications, while retaining turn-key functionality. The following outlines a few of the changes that can be made and other components that are available:

Sensors

Sensors can be removed, added, or swapped out with models that meet your project's requirements. Verify that the sensor is compatible with the CR200X before ordering a sensor to be used with this system.

- › CS655 Soil Water Content Reflectometer
- › HC253 Rotronics Temperature and Relative Humidity sensor
- › 05103 R. M. Young Wind Monitor

Communications

Communication options include Ethernet, cellular, fiber, RS-485, satellite, and telephone.

- › NL240 Wi-Fi Module
- › NL201 Ethernet Module
- › RavenXTV Cellular modem
- › RF401A 900 MHz Spread-Spectrum RF Radio

Power

The SWx100 can be powered by AC and/or DC power sources. Larger solar panels may be needed for bigger loads from communications or sensors. Batteries are sized according to demand and location.

- › SP10/20 10/20 W Solar Panel
- › PS200 Smart Power Supply and Controller

Mounting

In addition to a 10 ft instrumentation tripod, we offer a stainless steel 10ft tripod, and a variety of towers. Several sensor mounting options are available to change the default mounting configuration.

- › UT10/20/30 10/20/30 ft instrumentation tower for permanent installations
- › CM110 10 ft Stainless-Steel Instrument Tripod
- › CM206 6 ft Crossarm with Mounting Bracket
- › CM106B Guy Kit available for windy locations

Software

Campbell Scientific recommends our VisualWeather application which provides tools for logger programming, automatic scheduled data collection, reports and graphical data display. Mobile devices can connect to Ethernet connected stations with our LoggerLink app.



Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | www.campbellsci.com
USA | AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | SE ASIA | SOUTH AFRICA | SPAIN | UK

© 2015, 2017
Campbell Scientific, Inc.
January 20, 2017