

# Weather Stations

FOR PORTABLE APPLICATIONS

*Sensor Options | Transportation Case | Tripod Mast | Battery Pack*



 **Columbia**  
Weather Systems



# Professional Monitoring for Portable Applications

Portable Weather Stations, popular with HazMat teams and environmental researchers alike, offer a rapid-deployment option for short-term on-site weather monitoring. US DHS SAVER report commended CWS for detailed user manual “easy to use and provided clear instructions” and the Weather Display Console “offering many easy-to-use display options.”

## Available in Wireless and Datalogging configurations.

All CWS **Portable Weather Station** systems include:

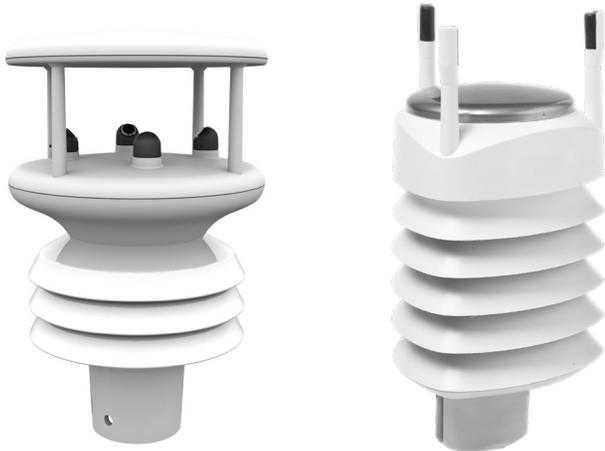
- Selected meteorological sensor(s) (see below) with 15-foot cable
- Sealed battery system with charger for continuous monitoring
- Rugged, wheeled carrying case houses batteries with quick-connect sensor plug-in jacks
- Tripod sensor mast simple set-up for secure and stable operation
- Heavy-duty canvas tripod transportation bag with tote straps
- Choose weather data monitoring option(s) (see page right)

The entire system is operational within minutes to provide critical weather information where and when it is needed. The bottom line is that the conditions at an incident may not be exactly as forecast or reported elsewhere. There’s no substitute for immediate, accurate, on-site weather data.



## Quick Deploy • Interoperable • Experience

We’ve been in the business of weather monitoring for over 40 years. Our mobile weather stations were developed by a former Air Force meteorologist specifically for the public safety market. Columbia Weather Systems makes weather monitoring easy so you can do your job better.



SYSTEM COMPONENTS	WIRELESS	DATALOGGING
Transportation Case	X	X
Sensor	X	X
Transceivers	X	
MicroServer		X
Tripod with Bag	X	X

### Magellan MX™ Portable

- Compass / GPS
- All-in-one sensor with multiple configurations
- Ultrasonic wind sensor
- Optical rain sensor
- Temperature, humidity, and pressure

### Orion Nomad™ Portable

- All-in-one sensor head
- No moving parts
- Ultrasonic wind sensor
- Impact rain sensor
- Temperature, humidity, and pressure

*“We can deploy within minutes after arriving on scene... Having ‘Live’ weather data is vital to our operation.”*  
 ~Tualatin Valley Fire and Rescue, HazMat Team

# Monitoring Options

## Weather MicroServer™

Self-contained, proprietary weather data logger and powerful communication device. Compatible with all CWS weather stations and offers:

- Browser interface
- Data logging with 1-year capacity at 1-min interval
- "Internet-ready" weather monitoring with FTP output, XML, and Internet interfaces
- Industrial communication protocols (Modbus, DNP3, BACnet, and SNMP)



Four serial ports offer interface to the weather station and additional sensors such as visibility and ultrasonic wind sensors. Analog and digital channels available for additional sensor such as temperature, solar radiation, and rain gauge. The MicroServer provides real-time weather data to WeatherMaster software and the Display Console over the network. This allows users to simultaneously monitor the weather over the network.

## Cloud Weather Server™

Free with the Weather MicroServer, this service offers real-time weather data monitoring on the Internet.

- View display screen remotely from any device using a web browser
- Data uploaded every five seconds
- Be alerted to critical weather conditions with alarm feature that generates email and push notifications
- For one or more weather stations

## CWS Weather Monitor App™



Check current conditions quickly from a hand-held mobile device for decision-making in the field. The CWS Weather Monitor App is compatible with all CWS weather stations that include the Weather MicroServer.

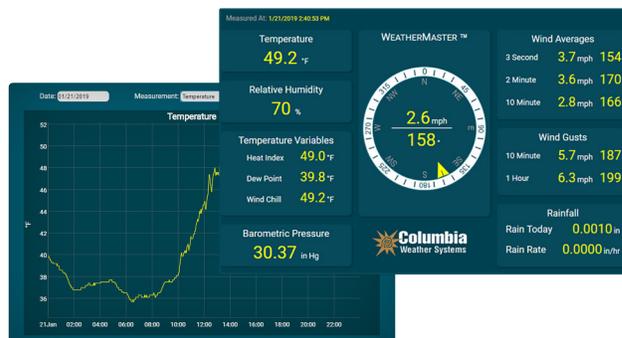
The app includes real-time weather monitoring screens, NWS forecasts, and custom alarm notifications. Access to a Cloud Weather Server account is required.



## Weather Display Console™

This touchscreen weather monitoring device displays real-time meteorological data, plus computations for wind chill, heat index and other calculated parameters. Measurements are designed to be viewed clearly from a distance even in a darkened control room.

- Seven-inch, TFT color LCD panel with 800 x 480 pixels resolution
- Connect directly to the weather station with a serial port or to the Weather MicroServer utilizing existing Ethernet
- Three mounting options: Desktop/Wall-Mount, Panel Mount/Flush Mount, 19" Rack Mount



## WeatherMaster™ Software

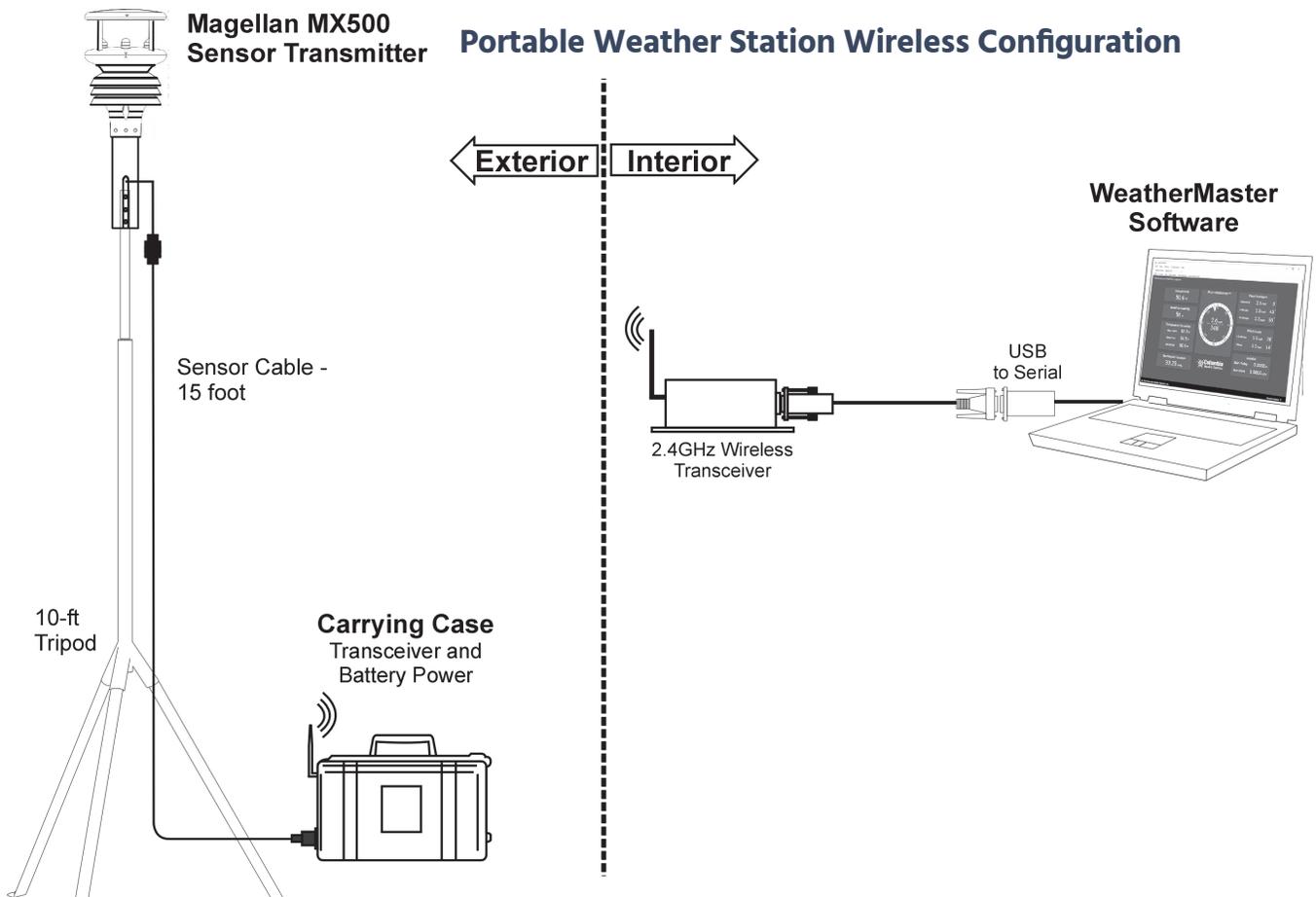
Professional-grade software providing real-time computer weather monitoring with display and automatic logging of all measured and calculated parameters.

- Expandable SQL database to archive measured and calculated parameters
- Graphing and trend display of all parameters
- Alarm notification via computer, email, and/or text
- Multi-station monitoring and data acquisition
- Interface with CAMEO/ALOHA software for plume modeling and evacuation corridor predictions
- Interface with Weather Underground

## 4-20 mA Signal Output

For industrial PLC interface, the Orion 420™ offers 4-20mA signal output to interface to PLC, DCS, and SCADA systems.

# System Diagram



Left: Rugged, wheeled carrying case houses met sensors, batteries, and wireless transceiver with quick-connect sensor plug-in jacks. (Shown with Magellan MX500 sensor with GPS.)

Call or email today for a quote.



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