



WEATHERPAK^M

Mobile Weather Station for Emergency Response Applications



Quick-Deploy System

For chemical, biological, and radiological response

Overview

WEATHERPAK^M weather stations are impervious to airborne chemicals and designed to be deployed directly in the hot zone. These models can be set up in less than 60 seconds, without tools, by one person wearing full protective gear. A WEATHERPAK^M weather station can survive a 1.8 m (6 ft) drop

to concrete and withstand a decontamination scrubdown, as well as many other environmental hazards.

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Benefits and Features

- ▶ Meets US EPA's standard for Station for Atmospheric Measurements (SAM)
- ▶ Designed for quick deployment
- ▶ Automatic detection and display of data from multiple units
- ▶ Portable design ideally suited for HAZMAT response
- ▶ SAM data forwarded to ALOHA[®] and other plume modeling software
- ▶ Integrated compass and GPS for location and orientation information
- ▶ No-moving-parts ultrasonic wind sensor that requires no calibration

Detailed Description

The WEATHERPAK^M is a portable, self-contained weather station for rapid response such as HAZMAT and emergency response applications, and it is designed to be deployed by personnel in full protective gear. Assembly takes less than 60 seconds, and the system automatically begins making measurements and broadcasting data as soon as the tripod and canister are coupled. The weather station is completely sealed and built from corrosion-resistive materials, making it able to withstand harsh environments. Data is broadcast from the weather station to the display unit via 467.8000 MHz UHF

or a 900 MHz spread-spectrum radio. Data is transmitted in the standard ALOHA message format for direct ingestion by third-party plume modeling software.

The integrated 2-D ultrasonic anemometer provides years of maintenance-free operation, while a GPS and electronic compass automatically correct measurements based on location and orientation. An onboard barometer and temperature/relative humidity sensor round out the

measurement suite, exceeding the criteria for an EPA station for atmospheric measurements.

The WEATHERPAK[®]M is easily transported and includes a hard-sided case for the canister and a carrying bag for the quick-deploy tripod.

Specifications

Communications	› 467.8000 MHz; 2 W (US) › 900 to 920 MHz; 1 W (international)
Power Supply	› 10 D cell batteries › External 12 V (additional cable required) › 250 mA @ 12 V (average), 1 A maximum during transmission

Environmental

Operating Temperature Range	-30° to +60°C
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Air Temperature

Measurement Range	-35° to +70°C (-31° to +158°F)
Accuracy	±0.1°C at 25°C

Relative Humidity

Measurement Range	0 to 100%
Accuracy	0.5% at 25°C

Barometric Pressure

Measurement Range	600 to 1100 mBar
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Accuracy	0.1% at 25°C
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Wind Speed

Measurement Range	0 to 60 m/s (117 kts, 135 mph)
Accuracy	±2%
Resolution	0.01 m/s

Wind Direction

Measurement Range	0 to 360°
Accuracy	±2%
Resolution	1°

Compass

Accuracy	1° RMS
Resolution	0.1° RMS

GPS

Accuracy	› < 5m 90% (autonomous) › < 4m 90% (SBAS)
PPS	< ±25 ns 50%

For comprehensive details, visit: www.campbellsci.com/weatherpakm 



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