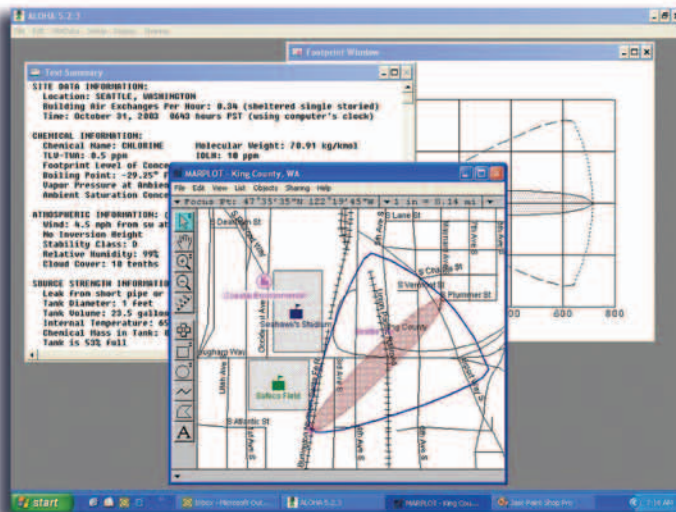


WEATHERPAK® WEATHER STATIONS FOR FIRST RESPONDERS



COASTAL ENVIRONMENTAL SYSTEMS, INC.
MONITOR YOUR WORLD

THE CRITICAL ROLE OF THE WEATHERPAK® ...



WEATHERPAK® automatically updates plume modeling software with accurate, site-specific weather data.

HazMat weather stations are typically used in two ways: as a rapid response tool, following the release of hazardous materials, or for routine monitoring of an area where a spill is likely to take place; i.e., a chemical manufacturing or storage facility.

In either case, site-specific weather data can be monitored visually on the display screen and simultaneously fed to plume dispersion software (CAMEO®/ALOHA®, SAFER® Systems, etc.). These programs graphically display the chemical plume overlaid on a map of the immediate vicinity. Incident command can now make decisions on deploying personnel, sheltering, evacuation, etc., based upon solid information—not guesswork.

WEATHERPAK®

MEASURES ...

Wind Speed & Direction, Temperature, Humidity and Barometric Pressure every second.

THEN COMPUTES ...

The values necessary to properly update the plume model. (A five-minute running average of Wind Speed & Direction and Temperature plus the Wind Stability Class Calculation.)

THE DATA IS ...

Transmitted to the PC (or MAC) automatically updating the plume model every thirty seconds.

The LCD display is also updated every thirty seconds—displaying both the calculated and "Real Time" weather data.

WEATHERPAK® AND C-5 SAM™ KEEP FIRST RESPONDERS FROM BECOMING "FIRST CASUALTIES"



WEATHERPAK® TRX TRIPOD MOUNTED

- Updates CAMEO®/ALOHA®
- Deployable in the hot-zone
- Radio telemetry (5 to 7 mile line-of-sight)
- Automatic orientation to True North

WEATHERPAK® VM VEHICLE MOUNTED

- Updates CAMEO®/ALOHA®
- Runs off vehicle power (110V / 12V)
- Hardwire data transmission
- Automatic orientation to True North



WEATHERPAK® HAS BEEN THE #1 CHOICE OF FIRST RESPONDERS FOR MORE THAN 20 YEARS!

The WEATHERPAK® weather station is a professional quality instrument designed specifically for use by First Responders. Don't be fooled by cheap "look-alike" stations designed for hobbyists and home use, or products rushed to market to capitalize on Homeland Security.

In the mid-1980s, NOAA (National Oceanographic Atmospheric Administration) came to Coastal with the prototype of their plume dispersion modeling software, ALOHA®. They asked us to build a portable weather station for HazMat response. Since that time, Coastal Environmental Systems, Inc. has become the leading manufacturer of portable HazMat weather stations.



"The WEATHERPAK® 400 is needed by the Fire Prevention Department, and is the only accurate means of inputting data directly into the ALOHA® air model for on-scene plume modeling. The impact of not providing this equipment may result in injury or death due to the lack of accurate on-scene data...."

Asst. Chief Kevin Farrell
Aberdeen Proving Grounds FD
Aberdeen, MD

"Prior to using the WEATHERPAK® I felt, based upon my experience, I knew how to determine the local wind and wind shifts. The first time I saw a WEATHERPAK® in operation, I understood how wrong I was.... I am now a strong supporter of this technology. Our area has four WEATHERPAK®s and we use them all the time.

"First Responders deal with very serious incidents. They should not have to 'take a guess' at wind speed, direction, temperature and humidity."

Timothy C. Wixom, Director
Steuben County 911 Enhanced
Bath, New York

"In the Midwest, we are known for weather that changes every five minutes. This tool gives our team accurate on-scene weather data, instead of guessing. Speaking as a firefighter ... I'm glad we have the WEATHERPAK® on our truck...."

Special Services Chief Cliff Weaver
Hazardous Materials Team
Evansville, Indiana FD

C-5 SAM™ meets the fundamental requirements to automatically update plume modeling software such as CAMEO®/ALOHA®, etc. C-5 SAM™ is designed primarily for smaller budgets and communities with low chance of a truly catastrophic incident occurring.

The C-5 SAM™ is typically mounted on a response vehicle but is also available in a "tripod" or "building mounted" configuration.

Some important features:

- Direct hard-wired telemetry
- Data protected against RF and EMI interference
- Manually oriented to True North
- Sensor head constructed of non-sparking, 6061-T6 Mil-Spec aluminum

WEATHERPAK® APPLICATIONS:

- HazMat, Chem/Bio Response
- Disaster Preparedness
- Wildland Fire Weather
- Prescribed/Training Burns



FOR MORE INFORMATION,
PLEASE VISIT OUR WEB SITE:
WWW.COASTALENVIRONMENTAL.COM



**C-5 SAM™ WEATHER
COMMAND**
A RUGGED AND RELIABLE
LOW-COST ALTERNATIVE
TO THE WEATHERPAK®

FEATURES

The WEATHERPAK® 400 has been designed specifically for First Responders.

WEATHERPAK® is easy to deploy, simple to operate, and rugged beyond belief. Coastal has served the fire service and military response community for over twenty years. We understand when you arrive "on scene" you have more serious issues to address than: "How do we get the weather station working?" or "Am I getting accurate weather data?"

Here are just a few examples:

AUTOMATICALLY UPDATES CAMEO®/ALOHA®, SAFER® SYSTEMS ...

and other chemical plume-modeling software. The WEATHERPAK® automatically computes five-minute running averages of wind data and wind stability class (the most important factor in determining chemical plume size and dispersion). This data is updated every thirty seconds, along with air temperature, humidity and barometric pressure.

SELF-ALIGNING ELECTRONIC COMPASS

What is the compass declination or off-set in your area? Do you add or subtract the correction? The WEATHERPAK® eliminates lost time and potentially dangerous misalignments because its internal electronic compass is factory preset for use in your region.

CONSTRUCTED OF NON-SPARKING, MIL-SPEC ALUMINUM

The WEATHERPAK® is designed to withstand harsh environments, rough handling and to provide many years of reliable service. Built of a special Mil-Spec grade aluminum, which is extremely rugged and resistant to corrosion, the WEATHERPAK® will survive a 6 foot drop to concrete and is water immersible (for decontamination, etc.).

DEPLOYABLE IN LESS THAN ONE MINUTE ...

by a Responder wearing protective gear, without using tools. There are no cables to connect ... no exposed wires or switches.

VERSATILITY "BUILT-IN" TO MEET YOUR UNIQUE REQUIREMENTS

The WEATHERPAK® 400 TRx is the radio telemetry version with a 5 to 7 mile line-of-sight range. It is designed to be deployed in, or near, the hot-zone.... Recommended by ALOHA® experts, this provides the only truly reliable weather data for the plume modeling software.

Also available in a vehicle mounted configuration, the WEATHERPAK® 400 VM is typically mounted on a command or other response vehicle.

Or the WEATHERPAK® can be configured to do both!

WEATHERPAK® HAS STOOD THE TEST OF TIME

Although the WEATHERPAK® has been upgraded many times in its twenty-year history, one thing has remained the same ... the satisfaction and loyalty of the hundreds of WEATHERPAK® users. Talk to your peers who own one or just ask us; we are happy to provide you with our extensive reference list!



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SPECIFICATIONS

SENSORS

WIND MONITOR

Wind Speed	
Range:	0 to 60 m/s (130 mph)
Survival:	100 m/s (220 mph)
Threshold:	1.0 m/s (2.2 mph)
Wind Direction	
Range:	360° mechanical, 355° electrical
Survival:	100 m/s (220 mph)
Threshold:	0.9 m/s (2.0 mph)

TEMPERATURE

Operational Range:	-40°C to 50°C (-40°F to 122°F)
Accuracy:	±0.2°C over full range (0.36°F)
Resolution:	0.5°C (1.0°F)

COMPASS

Accuracy:	±1.0°
Resolution:	1°
Tilt Limit:	±45°

ELECTRONICS

32-bit Microcontroller	
Memory:	256K (1 MB optional)
Display:	4 x 20 character LCD with EL backlighting
EMI/RFI:	3 levels of protection

MECHANICAL

Size:	4" x 22.5" (10.3 cm x 57.2 cm) (base unit without wind monitor)
Weight:	8 lbs (3.6 kg) (base unit without wind monitor)
Carry Weight:	
ABS Carry Case w/WEATHERPAK®	24 lbs. (10.9 Kg)
Canvas Tripod Bag	30 lbs. (13.6 Kg)
Material:	6061-T6 aluminum, 316SS hardware, O-Ring sealed Mil-Spec connector, thermoplastic resin coated
Set-up Time:	60 seconds, from carry case to full operation

ENVIRONMENTAL

The WEATHERPAK® meets or exceeds exposure to the following environmental tests per MIL-STD-810D as follows:

Temperature:	Operation from -40°C to 70°C (-40°F to 160°F)
Pressure:	Operation from 800 to 1100 mBar
Humidity:	10 day exposure with 100% RH
Rain:	20 in/hr
Shock/Vibration:	Survival of 6 ft drop