

Introduct

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For Fire Hazmat & Emergency Operations



Capricorn 2000EX™ Vehicle-Mount Weather Station

Sensor Specifications

Temperature: Digital semiconductor type

Accuracy: ± 0.9°F from +14° to 185°F

± 3.6°F from -67° to 257°F

Resolution: 0.01°F

Barometric Pressure: Silicon shear stress strain gauge; temperature compensated and calibrated

Accuracy: ± 0.03 in. Hg over range

Range: 27.00 to 33.96 in. Hg

Resolution: 0.01 in. Hg

Wind Speed: Sealed reed switch

Accuracy: \pm 0.25 mph from 0 to 23 mph, \pm 1% from 24 to 160 mph

Range: 0 to 160 mph (139 knots)

Resolution: 1 mph

Starting Threshold: 0.9 mph

Wind Direction: Precision Potentiometer

Resolution: 2 degrees

Range: 0 to 360 degrees

Accuracy: ± 4 degrees

Relative Humidity: Capacitance

Accuracy: ± 3% (or better) from 10 to 90% RH

Temperature Effect: less than <±1.5% RH

Stabiltiy: ± 2% RH over 2 years

Reporting Resolution: 1% RH

Rainfall: Tipping bucket

Accuracy: ± 1% at 2 in./hr or less Resolution: 0.01 inch





Columbia Weather Systems, Inc. 2240 NE Griffin Oaks, suite 100 Hillsboro, OR 97124 Toll-free 1 888 508-7375 Phone (503) 629-0887 Fax (503) 629-0898 info@columbiaweather.com www.columbiaweather.com Capricorn 2000EX Vehicle-Mount[™] Weather Stations are specifically designed for Emergency Management Personnel to quickly and easily attach the mast and sensors to any Incident Response Vehicle.

This **8-ft telescoping sensor mast** is made of rugged anodized aluminum, with heavy-duty powdered-coated steel mounting brackets which are permanently installed on the vehicle. The telescoping mast and affixed sensors are detachable for easy storage when not in use.

The built-in **North Orientation Offset** feature quickly and efficiently orients wind direction readings to North.

WeatherMaster[™] software interfaces with Cameo/Aloha software to automatically ingest weather data for HazMat applications.

With the Vehicle-Mount option and the **19**" rack mount Weather **Display console**, the Capricorn becomes the ideal weather station for mobile vehicle operations.

Weather Parameters Monitored

- Temperature (up to four sensors)
- Barometric pressure, standard sensor
- Wind direction
- Wind speed with gust and average wind
- Relative humidity
- Heat index
- Wind chill
- Daily max/min
- Rainfall (optional)

Standard System Includes:

- Control module/data logger, wall mount power supply, and internal **barometric pressure** sensor
- One temperature probe with 50 ft. of cable
- Relative Humidity probe with 50 ft. of cable
- Self-Aspirating radiation shield for temperature and humidity sensors
- Wind speed and direction sensor with waterproof cable connector, mounting hardware (includes alignment adapter) and 50 ft. of cable
- Telescoping Pole (8 foot) and Mounting Brackets
- RS-232 computer cable, 6 feet