



GLOBE-approved  
weather station

Make *your* school a  
GLOBE Program school.



“In 2007, our superintendent asked me to find a weather station for our school district. We wanted a reliable, low-maintenance, web-enabled weather station to provide live weather data to our district web site. After doing some research, I discovered the perfect product—the WeatherHawk weather station.”

*Gene Tranchino - Director of Technology / Elwood Schools*



## WeatherHawk® Weather Stations

Equip your school with a system that shows your students live weather measurements, and then automatically records and transmits that data for unlimited learning opportunities.

WeatherHawk includes two different high-accuracy product families:

- The Signature Series is a cost-effective solution, with mechanical sensors that help students visualize changes in the weather.
- 500 Series systems are low profile, low maintenance, all solid state, and meet higher specifications.

Both systems feature industrial-grade components to ensure high reliability.

With its integral datalogger, the WeatherHawk collects, stores, and transmits sensor measurements to a classroom computer—or even to the

school's network server, where all classes can view and use the data at an age-appropriate level.

The school owns and stores the data on their host server, with no on-going fees for ownership and use.

WeatherHawk stations can connect directly, wirelessly, or via IP interface hardware. Both system families have many mounting options.

## Features

WeatherHawk provides real-time data:

- Wind speed and direction
- Temperature
- Relative humidity
- Barometric pressure
- Solar radiation
- Rainfall
- ET (evapotranspiration)

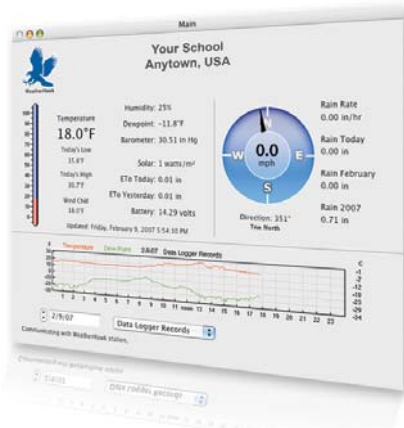




## Software

WeatherHawk-XP/X software manages the weather station; collects, displays, and logs data; and generates reports. The software can run on the school PC or Mac, and it can connect to the Internet and support a school weather web page.

A free license for InspireData software is delivered with every WeatherHawk system. InspireData builds students' data literacy and analytical skills, and strengthens critical thinking. Classroom licenses are available from Inspiration Software or WeatherHawk.



WeatherHawk® XP/X software

"Our school is near Denali National Park, Alaska, and we've had a WeatherHawk for 2½ years. For 3 months there is no direct sunlight and our average temperatures are -20°F. Our wireless, solar-powered WeatherHawk with external battery pack reliably makes it through the winter, transmitting data to our school server and the WeatherUnderground."

Pete Hauschka

- Principal/Cantwell School

## School Uses

- **Make data available to the public.** Contribute to the community by posting data collected by the WeatherHawk on a school weather web site.
- **Monitor weather at athletic events.**
- **Fulfill national education standards** for core curriculum in math and science.
- **Get students more involved** with the learning process when they monitor weather as it happens and collect and analyze data themselves. They can create graphs, diagrams, tables, and other models to build in-depth understanding.

## GLOBE-Approved

GLOBE is a world-wide, hands-on science program for primary and secondary schools. It's an international exchange of weather knowledge that supports student learning and research.



Offer your students this rich educational experience with a GLOBE-Program-compatible WeatherHawk weather station.

## Signature Series Specifications



### Weather Station

**Temperature Range:** -40 to +158° F (-40 to +70° C)

**I/O:** Direct connection RS232  
Optional wireless RF  
Optional IP server module

**Charging Voltage:** 16 to 22 V

**Current Drain:** 10 mA

### Sensors

<b>Air Temperature:</b>	Thermistor	<b>Range:</b>	-40 to +122°F (-40 to +50°C)
<b>Relative Humidity:</b>	Resistive bulk polymer	<b>Range:</b>	0 to 100%
<b>Barometric Pressure:</b>	Piezoresistive transducer	<b>Range:</b>	4.43 to 33.96 in. Hg (15 to 115 kPa)
<b>Solar Radiation:</b>	Silicon pyranometer	<b>Range:</b>	0 to 1000 W/m <sup>2</sup>
<b>Rain:</b>	Tipping bucket--self draining	<b>Rate:</b>	0 to 28 in./hr (0 to 720 mm/hr)
		<b>Resolution:</b>	0.04 in. (1.0 mm)
<b>Wind Direction:</b>	Vane	<b>Azimuth:</b>	0 to 360 degrees
<b>Wind Speed:</b>	Three-cup anemometer	<b>Range:</b>	0 to 210 mph (0 to 60 m/s)

## 500 Series Specifications



### Weather Station

**Temperature Range:** -40 to +140°F (-40 to +60°C)

**I/O:** Direct connection RS232  
Optional wireless RF  
Optional IP server module

**Charging Voltage:** 16 to 22 V

**Current Drain:** 18 mA without heater  
1.1 A with heater

### Sensors

<b>Air Temperature:</b>	Capacitive ceramic	<b>Range:</b>	-60 to +140°F (-52 to +60°C)
<b>Relative Humidity:</b>	Capacitive thin-film polymer	<b>Range:</b>	0 to 100%
<b>Barometric Pressure:</b>	Capacitive silicon	<b>Range:</b>	17.72 to 32.48 in. Hg (60 to 110 kPa)
<b>Solar Radiation:</b>	Silicon pyranometer	<b>Range:</b>	0 to 1000 W/m <sup>2</sup>
<b>Rain:</b>	Piezoelectric	<b>Rate:</b>	0 to 7.87 in./hr (0 to 200 mm/hr)
		<b>Resolution:</b>	0.001 in. (0.01 mm)
<b>Wind Direction:</b>	Ultrasonic	<b>Azimuth:</b>	0 to 360 degrees
<b>Wind Speed:</b>	Ultrasonic	<b>Range:</b>	0 to 134 mph (0 to 60 m/s)



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