



Solutions For Power & Process Control

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If you're looking for a superior weather station, the **Davis Vantage Pro2 Plus Weather Station** is as good as they come! Vantage Pro2 offers the professional weather observer and the serious weather enthusiast rugged performance and a wide range of options and sensors. You'll get your own local forecast, highs and lows, totals or averages, and graphs for virtually all weather variables over the past 24 hours, days, months or years - all without using a PC. Vantage Pro2 is also an excellent choice for emergency professionals, farmers, schools, researchers, municipalities, and others to monitor wind and moisture conditions, irrigation requirements, and potential flooding. It can be customized with a range of add-on options, such as additional temperature and humidity sensors, soil moisture stations, and long and short-range repeaters.



Two key factors that set the Vantage Pro2 apart from many other complete weather stations are the refresh rate and the transmission distance:

- **Refresh Rate** - A packet of data is sent from the outdoor transmitter to the receiver every 2 1/2 seconds! This means when you look out the window and see the wind blowing, the weather station will reflect it almost immediately.
- **Transmission Distance (wireless models)** - The first in its consumer price range to use frequency hopping spread spectrum radio technology, the Vantage Pro2 can transmit and receive data up to 1000' (300 m) line of sight. This is a much greater distance than most other weather stations. This technology also provides improved reception through multiple walls and greater immunity from RF interference.

The Davis Vantage Pro2 provides extensive additional information for each weather variable. These include daily highs and lows, temperature changes by the hour, air pressure changes and astronomical data such as moon phase and meteor showers. Additional consoles can be purchased for placement in other areas of your home such as a den, bedroom or backyard.

To make viewing weather data easier at night, Davis designed the Vantage Pro2 console with an easy-to-read backlit LCD display. A data collecting device in its own right, the console's built in sensors provide indoor temperature and humidity as well as barometric pressure measurements.

The Vantage Pro2 6163 outdoor Integrated Sensor Suite (ISS) is energized by a solar panel during the day and stored energy for power at night, making it an ideal product or gift for the "green" consumer. The Davis 6163 also includes Davis Instruments patented **24-hour Fan-Aspirated Radiation Shield** for maximum accuracy of temperature and humidity readings. The system has additional radiation shield plates and a second solar power panel, which powers a motor-driven fan. The fan draws air through the sensor chamber 24 hours a day, 7 days a week. Airflow across the sensors is 500 feet per minute (2.5 m/s). At night, when the effects of radiation are less, the solar-powered model runs on battery power and the airflow is 280 feet per minute (1.4 m/s). In far northern or southern latitudes, or in areas with extended periods of heavy cloud cover, there may not be enough sunshine to power the fan or recharge the battery during the winter. However, as the level of sunlight goes down, the need for fan aspiration also diminishes. The fan will start running and the battery will recharge as soon as sufficient sunlight returns.

Vantage Pro2 Plus models include two additional sensors:

- **Solar Radiation Sensor** measures solar radiation and solar energy. You can display solar radiation, highs for the day, month, and year as well as evapotranspiration and Temp/Hum/Sun/Wind (THSW) index, and set alarms for high readings. The diffuser element and housing are carefully designed for accurate cosine response. Silicon photo diode provides good match to solar spectrum. Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust.
- **UV Radiation Sensor** measures the sunburning portion of the UV spectrum. Allows you to display UV index, UV index for the day, the daily, monthly, and yearly highs; or change scale to see UV in current, hourly and daily MEDs, dose rate, and daily and accumulated dose. You can also set an alarm to warn of high UV dose/index. Multilayer filter provides a spectral response that closely matches the Erythema Action Spectrum. Diffuser provides excellent cosine response. Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust.

You can set over 70 alarms on the Vantage Pro2 for multiple functions simultaneously. You can view over 80 graphs including additional analysis of temperature, rain, rain rate, wind, and barometric pressure without a computer. The ticker-tape display shows forecast details and additional information with over 100 different messages. You can even link it to your PC via [Vantage Pro2 WeatherLink](#) software and upload near real-time weather information to your website.

All Davis Vantage Pro 2 Complete Weather Station models include:

- **Console with AC power adapter.** Wireless console may also be powered using three C batteries.
- **Integrated sensor suite with rain collector, temperature and humidity sensors, and anemometer.** The temperature and humidity sensors are integrated beneath the rain collector (very nice).
- **40 foot (12 meter) anemometer cable.** The anemometer connects to the Sensor Interface Module (SIM) on the side of the rain gauge.
- **AeroCone with bird spikes.** The AeroCone rain collector reduces wind-induced errors by providing a more aerodynamic path around the collector. Its contours are designed to streamline the airflow and reduce flow distortions. The design improves rain data accuracy

in high wind situations where the horizontal wind velocity can cause under reporting. The inside of the rain collector is equally well designed, keeping intact the carefully engineered interior walls that reduce splash out during high rain conditions. The new debris screen locks into place, ensuring that it remains in place during high winds and heavy rainfall events. The rain collector has optional spikes that can be installed to avoid potential nesting.

Not sure which model to choose? Visit our [Davis Weather Stations Comparison Chart](#) to help you decide. Includes the [Davis Vantage Vue](#) weather station as well.

Note: We do carry magnetic compasses to help you orient your anemometer to true north. Those can be located under the "Accessories" tab. For more information on set up, please visit the [anemometer](#) page on our WeatherShack education center.

Maximum Number of Each Transmitting Station Type:

Transmitting Station (total number cannot exceed 8)	Displayed on Console	Logged by WeatherLink
Integrated Sensor Suite (included with station)	One (1)	One (1)
Anemometer Transmitter Kit (Davis 6332)	One (1)	One (1)
Leaf & Soil Moisture/Temp Station (Davis 6345)	Two (2)*	Two (2)*
Temperature Station (Davis 6372)	Eight (8)	Three (3)**
Temperature/Humidity Station (Davis 6382)	Eight (8)	Two (2)**
* One fully-populated station or two partially-populated stations (see Davis 6345).		
** WeatherLink will log a maximum of three (3) Davis 6372 Temperature Stations or one (1) Temperature Station and two (2) Davis 6382 Temperature/Humidity Stations.		

- **Vantage Weather Stations Console Features**
[Click here](#) for a detailed comparison chart of Davis Vantage Weather Stations console features.
- **Solar Powered Integrated Sensor Suite**
The wireless, rugged outdoor sensor suite runs on solar power. A lithium battery provides backup at night and during cloudy, winter days. The cabled version receives power from the base station.
- **Solar Powered Fan-Aspirated Radiation Shield**
Includes additional radiation shield plates and a second solar power panel, which powers a motor-driven fan.
- **Temperature**
Current inside and outside temperature, and for each of the last 24 hours. High and low temperature alarms.
- **Humidity**
Current inside and outside humidity, and for each of the last 24 hours. High and low humidity alarms.
- **Barometric Pressure**
Current and for each of the last 24 hours. Five position trend arrow shows whether pressure is rising, falling, or stable. High pressure warning for storm clearing (rising trend) and low pressure for storm warning (falling trend).
- **Rainfall**
Rainfall for the last 15 minutes and the last 24 hours, 24 days, 24 months, and 24 years.

Flash flood and 24 hour rain alarms. Rain gauge uses [tipping bucket](#) (self-emptying) technology.

- **Rain Rate**
Current and for each of the last 24 hours. Rain rate alarm.
- **Rain Storm**
Rainfall for the last 24 storms, with beginning and ending dates for each storm. Rain storm warning and alarm.
- **Wind Speed**
Current wind speed. Average for the last ten minutes and each of the last 24 hours. High and average wind speed alarms.
- **Wind Direction**
Current and for the last 24 hours, 24 days, and 24 months. Direction of high wind speed.
- **Wind Chill**
Current wind chill. Wind chill alarm.
- **Dew Point**
Current and for each of the last 24 hours. High and low dew point alarms.
- **Heat Index**
Current and for each of the last 24 hours. Heat index alarm.
- **Solar Radiation**
View solar radiation, highs for the day, month, and year as well as evapotranspiration and THSW index. Set alarms for high readings.
- **Ultraviolet (UV) Radiation**
View current UV index, UV index for the day, the daily, monthly, and yearly highs; or change scale to see UV in current, hourly and daily MEDs. Set alarm to warn of high UV dose/index.
- **Highs & Lows**
For most weather variables, with time and/or date, for each of the last 24 hours.
- **Sunrise/Sunset & Moon Phase**
Time of sunrise/sunset and moon phase at your location - it even takes daylight savings time into account!
- **On screen graphing**
Graph current conditions, averages, or highs and lows for the last 24 hours, days, months, or years.
- **Your Own Forecast**
The Vantage Pro2 forecast icons show sun, part sun, clouds, and rain, or snow. You may also check the scrolling ticker-tape at the bottom of the display for more details.
- **Optional Sensors**
Soil moisture, soil temperature, and more.

Major Dimensions:

- Console: 10.625" x 6.125" x 1.625" (270mm x 156mm x 41mm)
- LCD Display: 5.94" x 3.375" (151mm x 86mm)
- ISS Anemometer Side:
14 1/2" x 5 1/4" x 17 1/2" (370mm x 130mm x 445mm)
- ISS Rain Collector Side:
11" x 9" x 20" (330mm x 230mm x 510mm)

Backup Battery Life:

- Wireless Vantage Pro2 Console/Receiver: 274 days
- Wireless Vantage Pro2 Sensors: 240 days
- Note: Actual battery life will vary depending on station setup and usage.