

Things to consider when Purchasing an Electronic Weather Station

1. What weather variables are measured and recorded?

Most other stations offer barometric pressure, outside humidity and dew point, daily and yearly rainfall, wind speed and direction, wind chill, and outside temperature. Some also offer inside temperature and humidity, and a few even give you extra outside temperature readings and current rain rate. Only Vantage Pro gives you all these, plus:

- Additional Rainfall Information: 15-minute rainfall, hourly and monthly rainfall, and rainfall amounts for each of the last 24 storms.
- Additional Wind Speed Information: 10-minute average wind speed, direction of high speed, and 10-minute dominant wind direction.
- Apparent Temperature: Heat index (the combined effects of temperature and humidity) and, with the addition of a solar radiation sensor, temperature-humidity-sun-wind index.
- Optional Sensors for Solar and UV Radiation, something that's becoming more important as we become increasingly aware of the dangers to health caused by excessive exposure to the sun.
- Additional Information (with optional sensors) for agricultural users: evapotranspiration, leaf wetness, soil moisture, and soil temperature.

2. How easy is it to set up?

With most of the competing stations, you need to install each sensor separately, which adds complication and takes time and effort. Our Vantage Pro® weather stations are designed to make setup as easy as possible. The Integrated Sensor Suite is factory-assembled. Just complete a few minor assembly steps, insert the battery, and then you're ready to mount the sensors. Mount them all together using our optional tripod, or detach the anemometer to mount it separately. Flexible mounting options make it easy, either way.

3. What is the maximum transmission distance?

The wireless transmission range for most of the competing stations is generally quite limited. Although transmission range is highly variable (depending not only on the surrounding physical features of the land and structures but also on the RF interference in the area), our Vantage Pro weather stations

will almost always outperform the competition. And—unlike the competition—we offer wireless repeaters should you wish to extend the range.

4. How many highs and lows are measured and recorded?

Most other stations simply give you the current readings. If highs and lows are available at all, they are usually quite limited. Only Vantage Pro gives you the highs and lows (and/or totals or average readings) for just about all available weather conditions, with the time and/or date they occurred, for the last 24 days, months, or years. No other weather station on the market even comes close. And not only can you view the data numerically, you'll also see it on Vantage Pro's on-screen graphs, giving you instantaneous visual representations of long-term trends.

5. How often is the information updated?

The Vantage Pro transmitter sends a data packet to the console every 2½ seconds. The weather conditions that are the most variable (such as wind speed and direction) are updated with each packet, while most other conditions are updated every 10 seconds. With the competition's stations, the update interval is much longer: 30 seconds, or even up to 3 minutes. This may not seem like an important distinction. But try watching the wind gust, or the rain suddenly come pouring down. It's very disconcerting to be looking out the window, seeing something happening weather-wise, and not see it reflected on the console for what seems to be an eternity.

6. How is the forecast generated?

The competition generally bases their forecasts strictly on whether barometric pressure is rising or falling. This results in none too accurate a prediction. Vantage Pro uses a sophisticated forecasting algorithm which takes into account not only barometric pressure, but also wind, rainfall, temperature, humidity, and longitude and latitude. The result? A much more accurate forecast. Not perfect, but even the guys with the satellite pictures don't always get it right!

7. How is the forecast displayed?

The competition gives their forecast by means of an icon. We have similar icons, plus over 80 different forecast messages

that scroll across the bottom of the display when you press the FORECAST key. None of the other stations have this scrolling message—it is unique to Davis. The ticker tape also gives additional information, depending on which key you press. For example, press the WIND key to display wind speed, and you'll see a message showing you the 10 minute average wind speed. If it's raining, you can press the RAIN YR key to see the last 15 minutes of rain, or RAIN DAY to see the last 24 hours of rain. And these are just a few examples! None of the competition has anything like this.

8. How much data can you graph on the screen?

With Vantage Pro, you can graph just about every weather variable, with averages and highs and lows for most, and go back in time for minutes, days, months, and years. The competition typically graphs just one variable—barometric pressure—and typically just for the last 24 hours. With all the graphs on Vantage Pro, you can do tons of analysis, even without purchasing an additional software package (although we offer one of those, too). And you'll find that the more dramatic the weather is, the more fun it is to look at the graphs. Just how windy is it, and how does it compare to the last wind storm? And how much rain did we get this month, as compared to last month?

9. Can you use the station at higher elevations?

Our stations can be used up to 12,500 feet in elevation. Many of the competing stations are limited to 6,000 feet or below. If you're lucky enough to live and work—or perhaps enjoy a vacation home—in the mountains, you'll find that our Vantage Pro weather station works just fine, no matter what elevation you're at.

10. Is there a computer interface?

If you'd like to do even more analysis, you can add our WeatherLink data logger and software package. The data logger stores data at the interval you choose (from one minute to two hours) for up to six months. You can transfer the data whenever you like, or leave your computer on to have it automatically transfer every day. The data logger uses non-volatile memory, so you won't lose the data even if you lose power. For some of the competing stations, no software package is available. And while

other stations do offer a software package, they don't include a data logger—so your computer must be on and the software running at all times.

11. How many alarms are there?

Our alarms can be set for just about every weather variable, for just about any reason imaginable—over 70 alarms, in all. Like the graphs, the alarms found on the competition's stations are generally quite limited.

12. What is the accuracy, resolution, and range?

Our stations generally beat the competition's in accuracy, resolution, and range. It can be difficult to find the specs for competing stations. When we do find them, our testing shows that they are a bit, shall we say, optimistic. We are very proud of our specs, stand behind them 100%, and are proud to publish them in our catalog and on our website.

13. How many other people are using the stations?

Although our Vantage Pro stations are new, we have an installed base of thousands and thousands of happy Davis weather station users around the country and around the world. If you check out the "Weather Around the World" section on our website (www.davisnet.com/links), you'll see a listing for Norman, Oklahoma. Click on that link, and you'll go to the website for the National Weather Service's Storm Prediction Center. They're using our Weather Monitor II (a predecessor to the Vantage Pro station) to update the local "unofficial" weather conditions to their website. In addition, many Davis weather station owners participate as volunteer observers for the National Weather Service, the National Hurricane Center, and numerous local TV and radio stations.

14. How long has the company been in business?

In business since 1963, Davis Instruments opened up the home weather station market back in 1989. The competition has only appeared within the last few years. Our weather stations are manufactured right here in Hayward, California, and we have a full customer service and support staff. Most of the competing weather stations are made overseas, and it can be difficult (if not next to impossible) to get any kind of customer service or aftermarket support.