PRECISION

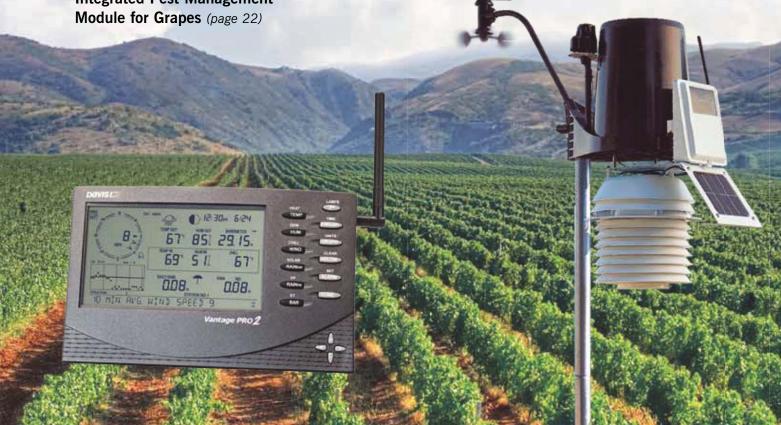
WEATHER INSTRUMENTS

See our **NEW** DAVIS **WEATHER PRODUCTS:**

• Envoy8X (page 11) Our industrial data logger

 Vantage Connect (page 12) Weather data sent by cellular connection





WEATHER MONITORING SYSTEMS FOR HOME, SCHOOL, INDUSTRY & AGRICULTURE



From Elegantly Simple to the Ultimate in Flexibility.

All Davis Instruments weather stations are designed to provide the high level of accuracy, reliability and ruggedness our customers have come to expect. But they are also designed to suit a wide range of weather observers' needs. Whether you are a weather hobbyist watching the weather for the pure fun of it, or someone reliant on accurate weather data for farming, research or business, you will find a Davis weather system to meet your needs.

Which Davis Weather Station is Right for You?

Weather enthusiasts want an accurate, reliable weather station that is easy to install and use. We've designed our Vantage Vue and Vantage Pro2 weather stations—with their integrated sensor suites, information-packed consoles, and long wireless distance—and WeatherLink software to meet those needs.

Some users also want to be able to create a customized weather system with add-on sensors, transmitters and receivers, more extensive data logging capabilities, specialized software, and remote communication options. In designing such a system, it is important to know how to mix and match sensors, transmitters and receivers, and what options can be used for remote communications. On pages 24–25, you'll find a few case studies of typical users to help you identify which components will give you the data you need, when and how you want to receive it.

We've also included a small icon on each product that identifies it as a sensor, transmitter, repeater, receiver, or software. Compatibility charts on pages 18 and 19 will help you design the perfect weather system for your special needs. You can, of course, call us at 510-732-7814 and our technical staff would be happy to assist you.



What's New in This Catalog?

We're pleased to include several new items in this catalog!

- Envoy8X™ is an exciting new addition that will log data from up to eight different transmitters, in any combination, and report to a weather database. (Page 11)
- Vantage Connect™ gives even the most remote weather station the ability to report data via a cellular connection. (Page 12)
- Universal Anemometer Interface allows anemometers not manufactured by Davis Instruments to be used with the Vantage Pro2. (Page 14)
- Integrated Pest Management Module for Grapes offers grape growers a powerful assessment of the risk of pest damage based on real time weather in their vineyards. (Page 22)

We've also included a peek at our automotive line of products, including our new CarChip® Connect. (*Page 29*)

Look for these additional symbols



Identifies the stations or sensors that may be NIST traceable. See page 26 for details.



Identifies stations suitable for use with GLOBE protocol. See page 26 for details.

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Contact Us

Please contact one of our customer service representatives if you have any questions. We're always glad to help.

Customer Service Toll-Free Order Line:

(800) 678-3669

sales@davisnet.com

Monday-Friday, 7:00 a.m.- 5:00 p.m.

Pacific Time.

Our representatives can answer most questions and assist you with your purchase.

Australia:

Instrument Choice 1300 737 871

Technical questions/troubleshooting:

Phone (510) 732-7814 Fax (510) 670-0589 support@davisnet.com Monday-Friday, 7:00 a.m.- 5:30 p.m. Pacific Time.

General:

Phone (510) 732-9229 www.davisnet.com info@davisnet.com

For information on the WeatherLink network go to www.weatherlink.com

For information on Vantage Vue go to www.vantagevue.com

For information on CarChip Pro go to www.carchip.com

For information on CarChip Connect go to www.carchipconnect.com

Australia: Instrument Choice 1300 737 871



Vantage Vue:

Perfect for the home weather-watcher.

Our newest weather station provides accurate, reliable weather monitoring in a self-contained, easy-to-install system. Vantage Vue™ gives you all the weather data you need. Sleek but tough—your outdoor sensor suite sets up in minutes and starts sending data wirelessly to your console anywhere in your home, school or business. You'll see current weather conditions, including indoor and outdoor temperature and humidity, barometric pressure, wind speed and direction, dew point and rainfall. You'll also get weather forecast icons, moon phase, sunrise/sunset times, graphing of weather trends, alarms and more. Vantage Vue also boasts the innovative Weather Center button that displays additional data on weather variables for today and over the last 25 days.

Features:

- Easy-to-read, backlit 3" \times 4 $\frac{3}{8}$ " (8 \times 11 cm) LCD screen
- · Glow-in-the-dark keypad
- Fast updates every 2.5 seconds (10x faster than the competition)
- Optional WeatherLink® data logger and software offer additional analyses in a variety of versions
- Wireless transmission from station to console up to 1,000 ft. (300 m)
 (3x farther than the competition)

1. TIME & DATE

View the current time and date or time of sunrise/ sunset.

2. MOON PHASE

See the eight phases of the moon.

3. FORECAST

Icons let you know to expect sun, partly cloudy, clouds, rain, or snow.

4. TEMPERATURE & HUMIDITY

Console updates outside temperature every 10 seconds and inside temperature every minute. In addition, outside humidity updates every 50 seconds and inside humidity every minute.

5. RETRANSMITS

Main console can extend range to additional consoles up to 1,000 ft. (300 m).

6. BAROMETER

Five-position trend arrow shows whether barometric pressure is rising, falling, or stable.

7. VARIABLE DISPLAY OPTIONS

See updated values every 10 seconds for heat index and wind chill to get a better "feel" for the outside environment.

8. RAIN

Console updates rain totals and rain rate every 20 seconds for the last 25 hours, days, months.

9. "CHANGE IN WEATHER SINCE YESTERDAY" FEATURE

Allows comparisons of changes of temperature and barometric pressure from day to day.

10. WEATHER CENTER

Weather Center provides additional information for each weather variable, such as daily highs and lows, temperature changes by the hour and barometric value changes. Also displays astronomical data such as meteor showers.

11. USER-FRIENDLY KEYPAD

Domed buttons are easy to feel and press. Glow-in-the-dark keypad buttons give you access to weather information at night. The "Done" key returns user to "current" screen from anywhere in the program.

12. GRAPHS

Graph the last 25 hours, days or months. View up to 50 graphs including temperature, rain, rain rate, wind and barometric pressure—all on the console.

13. "THIS TIME YESTERDAY" FEATURE

Data point on the graph indicates the weather during the same time yesterday to help compare and analyze day-to-day weather trends.

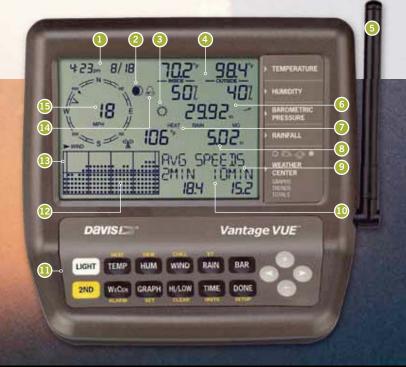
14. ALARMS

Set 22 simultaneous, different alarms to warn of dangers such as high winds, freezing temperatures, rain rate, heat index, flood warning, and more.

15. WIND SPEED

See windspeed updates every 2½ seconds.
Displays windspeed in miles per hour, meters per second, kilometers per hour or knots. Provides the average and high wind speed for two-minute and ten-minute intervals.





Multiple features included at an affordable price.

Vantage Vue includes a compact outdoor sensor array and an indoor LCD console. The fully-integrated, corrosion-proof sensor suite is built to take all the weather your location can give—freezing winters, springtime thunderstorms, blistering summer sun, and brisk autumn winds. The smaller profile sensor suite is designed to minimize visual impact in your yard or on your roof.

The sensor suite transmits data wirelessly to the easy-to-read Vantage Vue console. With a range of up to 1,000 feet (300 m), Vantage Vue data packets are sent every 2.5 seconds to the console. Because Vantage Vue's transmitters are radio-compatible with Vantage Pro2, you can mix and match components. For example, add a Vantage Vue console to your Vantage Pro2 system or extend your wireless range with long and short range repeaters. They all work together seamlessly. See www.vantagevue.com for more information.

6250 Vantage Vue PATENTED









1. WIRELESS

Frequency-hopping spread spectrum radio ensures consistent transmission up to 1,000 ft. (300 m) lineof-sight from integrated sensor suite to console.

2. RAIN COLLECTOR

Self-emptying tipping spoon measures rain in 0.01" increments. Metric version measures in 0.2 mm increments

3. ANEMOMETER

Records wind speeds as low as 2 mph (3 km/h) and is wind tunnel-tested to 180 mph (290 km/h).

4. WEATHER-PROOF HOUSING

Corrosion-resistant cover provides durability in

extreme conditions Electronics are potted or over-molded for added moisture shielding.

5. RADIATION SHIELD

Provides excellent protection from solar radiation and other sources of radiated and reflected heat for accurate temperature and humidity readings

6. TEMPERATURE/ **RELATIVE HUMIDITY**

Provides outside temperature readings from -40° F to 150° F (-40° C to 65° C). Also measures relative humidity from 1 to 100%.

7. EASY INSTALLATION

Installs easily and quickly with included mounting hardware kit.

8. WIND DIRECTION

Measures wind direction in compass points or degrees.

9. SOLAR PANEL

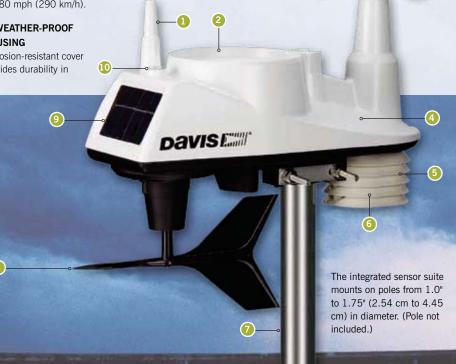
Energizes the station during the day. On-board super capacitor provides power at night. Lithium battery provides backup when needed.

10. BUILT-IN **BUBBLE LEVEL**

Allows for more accurate installation and better data collection.



6250 Vantage Vue



Vantage Pro2: Professional and rugged.

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 days, months or years—all without using a PC. Vantage Pro2 uses frequency-hopping spread spectrum radio to transmit and receive data up to 1,000 feet (300 m) line-of-sight. 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 solar and UV radiation sensors, soil moisture stations, and long and short-range repeaters.

Features:

- Large, backlit $3\frac{1}{2}$ " \times 6" (9 \times 15 cm) LCD screen
- Options available for UV/solar, soil moisture, short and long-range repeaters, and more
- Fast updates every 2.5 seconds (10x faster than the competition)
- Optional WeatherLink data logger and software offer additional analyses in a variety of versions
- Wireless transmission from station to console up to 1,000 ft. (300 m) (3x farther than the competition)

1. CURRENT & HISTORICAL DATA

View current data or highs and lows for up to 24 days, months, or years.

2. FORECAST

Icons let you know what to expect: sun, partly cloudy, rain, or snow. 12-hour icon forecast plus 24–48 hour ticker-tape forecast at bottom of console screen.

3. MOON PHASE

Track the eight phases of the moon.

4. TIME & DATE

View the current time and date, time of sunrise/sunset, time and date of highs/lows, and time and date of a graphed data point.

5. WIRELESS

Frequency-hopping, spread spectrum radio provides three times the transmission distance of the competition, improved reception through multiple walls, and greater immunity from RF interference.

6. RETRANSMITS

Main console can retransmit to additional consoles up to 1,000 ft. (300 m).

7. BAROMETER

Five-position trend arrow shows whether barometric pressure is rising, falling, or steady.

8. FIXED DISPLAY

Fixed display area shows the outside temperature, humidity and barometric pressure at all times.

9. SOLAR RADIATION

On Vantage Pro2 Plus, view solar radiation, highs for the day, month, and year as well as evapotranspiration and Temp/Hum/Sun/Wind (THSW) index. Set alarms for high readings.

10. UV

On Vantage Pro2 Plus, 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.

11. VARIABLE DISPLAY OPTIONS

View inside or additional temperatures, humidity, soil moisture, UV index, leaf wetness, wind chill, dew point, and two different heat indices. (Additional sensors or stations may be required.)

12. RAIN

Umbrella icon appears when it is currently raining. View last 24 storm totals with start and end dates. View daily, monthly, or yearly rainfall, and rain rate.

13. STATUS INDICATOR

Blinks to let you know that data packets are being received.

14. CONTROL KEYS

Use arrow keys to scroll through data on graph or view highs and lows over time. Plus and minus keys simplify data toggling.

15. TICKER-TAPE DISPLAY

Provides expanded forecast details and additional information on current conditions. Displays more than 100 different messages!

16. GRAPHS

Graph the last 24 hours, days, or months of readings or highs and lows. View over 80 graphs, including additional analyses of temperature, rain, rain rate, wind and barometric pressure.

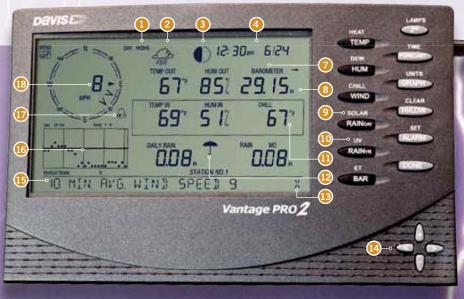
Vertical scale changes depending on what you are graphing.

17. ALARMS

Set more than 70 alarms for multiple functions simultaneously.

18. WIND

Compass rose with 16 points shows current and dominant wind direction. Inside compass rose, view wind direction to 1° resolution, or view wind speed.





View your weather data on your computer.

See our WeatherLink software on page 20.

The ultimate in versatility and options.

All Vantage Pro2 stations include a console and a versatile integrated sensor suite that combines our rain collector, temperature and humidity sensors and anemometer into one package. You can customize your Vantage Pro2 by adding consoles or the special-purpose options shown on the following pages. Vantage Pro2 weather stations are available in both wireless and cabled versions.

Vantage Pro2 stations

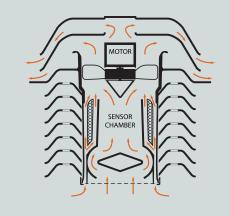
PATENTED











1. RAIN COLLECTOR

The Vantage Pro2 rain collector meets the collection area guidelines of the World Meteorological Organization. Reads rainfall amounts in 0.01" increments. Metric versions measure in 0.2 mm increments.

2. ANEMOMETER

Includes both wind speed and wind direction sensors. Rugged components stand up to hurricane-force winds. vet are sensitive to the lightest breeze. Wind tunnel-tested to 180 mph (290 km/h).

pictured:

Anemometer can be installed separately using 40 ft. (12 m) cable (included).

Optional Anemometer/ Sensor Transmitter Kit allows you to mount the anemometer in a different location than the rain collector and the rest of the integrated sensor suite, up to 1,000 ft. (300 m) from your wireless console.

3. OPTIONAL MOUNTING POLE

One of several installation options. For more, including our mounting tripod, see page 9.

4. 24-HOUR **FAN-ASPIRATED RADIATION SHIELD**

Models with 24-hour fan-aspirated radiation shields include additional radiation shield plates and a second solar panel, which powers the motordriven fan.

5 TEMPERATURE & **HUMIDITY SENSORS**

Located inside the radiation shield, which protects the sensors from solar radiation and other sources of radiated and reflected heat

6. SOLAR PANEL

Powers the wireless station during the day and charges the super capacitor for night operation. Lithium battery provides backup on cloudy, wintry days. (Solar panel is not included with cabled version.)

7. WEATHER-**RESISTANT SHELTER**

Provides protection against the elements for the integrated sensor suite's electronic components.

24-Hour Fan-Aspirated **Radiation Shield**

Models 6153 and 6163 include our patented 24-hour fan-aspirated radiation shield for maximum accuracy of temperature and humidity readings. A motor-driven 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.





The aluminum-plated tipping bucket in our rain collector is self-emptying, corrosion resistant, and laser calibrated for exceptional accuracy.



6152 Wireless Vantage Pro2

Now includes built-in bubble level for more accurate installation.

Choose the station that's right for you—from 7 different Vantage models.







Davis accuracy in a self-contained, easy-

Includes solarpowered transmitter.

to-install system.

Create a customized professional station with a wide range of options and sensors. Solar-powered transmitter and detachable anemometer.

Choose a cabled station for most economical installation. Ideal for areas where lightning risk is minimal. Choose wireless for easiest installation, additional sensor options, and reduced risk Includes UV & solar radiation sensors.

24-hour fan aspiration model achieves maximum accuracy of temperature & humidity readings by circulating the air. Ideal for arid climates.

vantage models.	of lightning damage.							
The Davis line of Vantage weather stations is built to provide a full weather system. To maximize your weather watching, a variety of additional sensors and stations are available to make your weather station even more comprehensive.	6250 Wireless	6152C Cabled	6152 Wireless	6153 Wireless w/Fan	6162C Cabled	6162 Wireless	6163 Wireless w/Fan	
CONSOLE								
Should be run using the included AC-power adapter. Add three C batteries (not included) for backup during power outages.		•			•			
May be run full-time using three C batteries (not included). May also be run using the included AC-power adapter.	•		•	•		•	•	
12-hour advance forecast icons	•	•	•	•	•	•	•	
24-48 hour advance forecast ticker-tape		•	•	•	•	•	•	
Weather center with scroll-through data screens	•							
INTEGRATED SENSOR SUITE								
Rain collector, temperature and humidity sensors and anemometer	•	•	•	•	•	•	•	
Detachable anemometer with 40 ft. (12 m) of cable		•	•	•	•	•	•	
UV and Solar Radiation Sensors		Optional	Optional	Optional	•	•	•	
DATA TRANSFER								
100' (30 m) cable		•			•			
Solar-powered transmitter with battery backup	•		•	•		•	•	
RADIATION SHIELD								
Standard radiation shield	•	•	•		•	•		
Daytime Fan-Aspirated Radiation Shield		Optional	Optional		Optional	Optional		
24-hour Fan-Aspirated Radiation Shield				•			•	
ADD-ONS								
Additional consoles to view data in more than one location	Optional		Optional	Optional		Optional	Optional	
Special-purpose Wireless Leaf & Soil Moisture/Temperature Station			Optional	Optional		Optional	Optional	
Wireless Temperature Station			Optional	Optional		Optional	Optional	
Wireless Temperature/Humidity Station			Optional	Optional		Optional	Optional	
Anemometer/Sensor Transmitter Kit			Optional	Optional		Optional	Optional	

Add another console and get the weather report wherever you are.

Vantage Vue and Wireless Vantage Pro2 Console/Receivers

Add additional Vantage Pro2 or Vantage Vue consoles to display weather data in the den, bedroom, kitchen, or even in your neighbor's house, if it's closer than 1,000 ft. (300 m). Vantage Vue transmitters are radio-compatible with Vantage Pro2 so you can mix and match components. Receive data directly from the outdoor sensors or use as a repeater, retransmitting the data from one console/receiver to another, extending range up to another 1,000 ft. (300 m). With Vantage Pro2 only, an additional console can receive data directly from any of our special-purpose wireless outdoor sensors (see pages 13 and 14).

6351

Vantage Vue

Console/Receiver

Wireless Vantage Pro2 Console/Receiver







- Larger display for easy-to-read weather data
- Special-purpose sensors expand data collecting

Customize your installation.

Weather station customers need flexibility when they're deciding how to install their equipment. With that in mind, Davis provides a variety of installation options to suit any weather station owner's needs.



Daytime Fan-Aspirated Radiation Shield Kit

An economical solution for adding the benefits of fan aspiration by retrofitting your wireless or cabled Vantage Pro2 or Pro2 Plus. Less costly than our 24-hour fan-aspirated radiation shield, but nearly 75% as effective in reducing the effects of daytime radiation. Solar-powered fan runs during the day. Since there is no backup battery, the fan will cease running when night falls and the effects of radiation are less. Kit includes fan, solar panel, additional radiation shield plates, and hardware.

7747 Daytime Fan-Aspirated Radiation Shield Kit



21" (0.53 m) long. Assemble the two together to make a single 37.5" (0.95 m) long pole. Outside diameter is $1^5/16$ " (33 mm). Fits both Vantage Pro2 and Vantage Vue.

7717

Mounting Pole

Kit



Mounting Tripod

Made of galvanized steel.

Brackets at the base of legs tilt to mount on a roof or uneven terrain. Two poles included measure 36.38" (0.92 m) each, but can also be used together to make a single 69.75" (1.77 m) pole. Fits both Vantage Pro2 and Vantage Vue.

7716 Mounting Tripod

Call 1 300 737 871

Free up your console—send data directly from outdoor sensors to your computer with Envoy.

Weather Envoy™

Weather Envoy, when used along with WeatherLink software, will collect and store the same data set as a Vantage Pro2 console. Connect it to your computer with hardware included with WeatherLink for easy and convenient downloading without a console/receiver. Use WeatherLink's automatic download feature, or manually download to your computer at your convenience, then use the WeatherLink software to view current conditions, graph and chart historical data, or even create your own weather web pages. (Also compatible with WeatherLinkIP.)

Like the wireless Vantage Pro2 console, wireless Weather Envoy can listen to up to 8 transmitters. However, the maximum number of each type of transmitter is limited (see comparison table on page 11).

It can also retransmit data to the console, effectively extending your station's range.

Weather Envoy includes its own barometer and inside temperature and humidity sensors. You may connect an external temperature probe (6475 or 6477) to replace the Envoy's internal temperature probe (see page 14). Both the wireless and cabled versions include an AC-power adapter. Either may also be run using one of our solar power kits. The wireless model can also run on three AA batteries. Expected battery life is four to six months depending on the logging interval. Batteries should also be added to the cabled model for backup during power outages. Requires WeatherLink (any model)

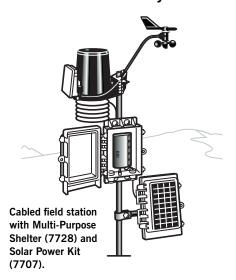
6316 6316C

Wireless Weather Envoy Cabled Weather Envoy





Cabled Weather Envoy

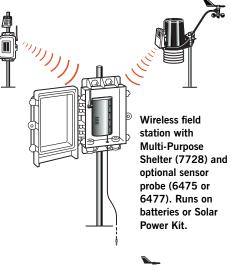




Can be used with one cabled ISS

Wireless Weather Envoy and Envoy8X

Can listen to up to 8 transmitting stations

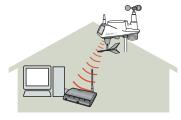




Transmit to both Envoy and console



Install Envoy next to your computer using included USB cable and AC adapter.



Wireless Home/Office Station



Retransmit data to Envoy from console

Envoy8X: Designed for customers with multiple stations and lots of data.

Envoy8X"

With 32 times the memory of our Weather Envoy, Envoy8X receives and logs data simultaneously from up to eight transmitting stations, in any combination—even eight Integrated Sensor Suites or eight Leaf Wetness & Soil Moisture/Temperature Stations! Doing the math, that means you can get data from 32 soil moisture sensors on one Envoy8X! Includes robust software that allows for data from many sensors and multiple Envoy8Xs to produce very large databases in Microsoft Access®, MySQL®, or Microsoft SQL Server®. You select which sensors to log, and choose a logging interval from 10 seconds to 2 hours. You can even add select third-party sensors that report readings in a 0-3 volt range. Data can be easily exported to

a spreadsheet program such as Excel®, or to WeatherLink to take advantage of WeatherLink's graphing and reports.

Storage capacity depends upon the logging interval, but is so large that you can download a remote field installation when it's most convenient. For example, an Envoy8X logging two Integrated Sensor Suites and two Soil Moisture/Leaf Wetness stations at a 15-minute update interval will store **over 365 days** worth of data.

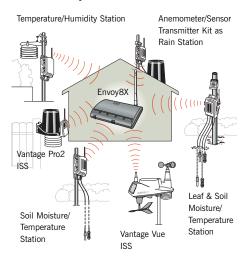
Envoy8X has built-in temperature and humidity sensors, as well as a barometer. The software will report data from those sensors as "inside" data, effectively giving you a ninth "station." You may connect an external temperature probe (6475 or 6477) to replace the Envoy8X's internal temperature probe (see page 14). Receives

data from all Vantage Pro2 radios and repeaters. Includes an AC-power adapter; may also be run using Solar Power Kit (7707), or on three AA batteries. Expected battery life is one to four months depending on the logging interval. Requires WeatherLink for Windows (USB or Serial). Not compatible with Vantage Connect.



Envoy8X logs data from all your transmitters

Can listen to as many as 8 transmitting stations in any combination



Envoy8X Software System Requirements:

Windows® XP, Vista™ or 7 operating system; 32 MB memory (64 MB recommended); VGA/SVGA monitor (800 x 600 or higher recommended). MS Access run-time engine is included. MS Excel, MySQL and SQL Server are not included.

Features	Weather Envoy	Envoy8X
Can listen to up to 8 transmitters	Yes	Yes
Maximum number of Integrated Sensor Suites (ISS)	1	8
Maximum number of Anemometer/Sensor Transmitter Kits	1*	8
Maximum number of Leaf & Soil Moisture/Temperature Stations	1**	8
Maximum number of Temperature Stations	3	8
Maximum number of Temperature/Humidity Stations	2	8
Stored memory capacity: 1 ISS @ 30 min. update	45 days	5 years
How is data viewed?	On PC using WeatherLink	On PC, using Envoy8X software or WeatherLink
Most frequent logging interval	1 minute	10 seconds
Works with WeatherLinkIP and WeatherLink for Mac	Yes	No
External databases supported	None	Access, MySQL, MS SQL Server
Can export data directly to Excel	No	Yes
Retransmits to another receiver	Yes	No
Works with 3rd-party sensors	No	Yes
Compatible with repeaters	Yes	Yes
Supports 0.1 mph (0.1 m/s) wind speed reading resolution	No	Yes***

- * When used to extend Vantage Pro2 anemometer from the ISS. Otherwise, O.
- ** Can use 2 only if one is leaf wetness and one is soil moisture.
- ***When using a Vantage Vue ISS. (Vantage Vue console does not support this resolution.)

Introducing Vantage Connect:

Bringing Even the Most Remote Weather Stations "Within Range" with Cellular Updates.

Up until now, the only way to get data back from a very remote transmitting station was to install a Weather Envoy in a shelter near the station, then drive out to the station and download the data directly. With new Vantage Connect™, you can have your remote Vantage Vue or Vantage Pro2 data sent to any computer or smartphone in the world. Configure the update interval on your Vantage Connect using the included WeatherLink software. Simply install the unit within range of your transmitting station. The data logger in Vantage Connect receives and stores the data, then automatically sends it via cellular connection to your secure page on www.weatherlink.com.

Vantage Connect

Vantage Connect can transmit any information that a Vantage Pro2 or Weather Envoy can log. Vantage Connect will even send you an email or text message alarm when preset weather conditions occur. Set alarms for high wind, frost, flood, or any other condition—as many as you like. The alarm capability works in real time, sending an immediate alarm regardless of the update interval in your service plan.

The Vantage Connect package includes WeatherLink software and your own WeatherLinkIP account. View the data online on your computer or smartphone, or download the data to your PC for analysis, archiving, and reporting in WeatherLink (CD also included). Vantage Connect will allow you to view and store data from any station that is within cellular range. Also includes hardware to mount to a vertical pole.

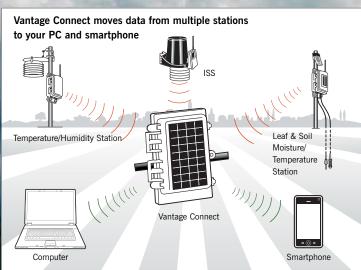
Radio compatible with all Vantage transmitters and repeaters. Solar powered with battery backup. Setup requires a PC. System Requirements: A computer running Windows XP and above.

6620 Vantage Connect

Vantage Connect Retrofit Kit

Allows you to turn your existing console into a Vantage Connect cellular modem. Just plug the console or Weather Envoy into the retrofit kit via serial cable included with WeatherLink. Includes AC power adapter. Requires WeatherLink for Windows, serial (6510SER).

6626 Vantage Connect Retrofit Kit



Annual Service Plan

Purchase of an annual service plan is required. Monthly subscriber fees depend on the frequency of your update interval. You can select 5-minute, 15-minute, or 60-minute updates.

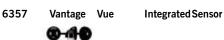
See www.weatherlink.com for product service plan information and availability for all customers including those outside of the US.



INTEGRATED SENSOR SUITES

Vantage Vue Integrated Sensor Suite

Because Vantage Vue's transmitters are radiocompatible with Vantage Pro2, you can mix and match components. Can transmit to Vantage Vue, wireless Vantage Pro2 consoles, wireless Weather Envoy, Envoy8X and Vantage Connect. Mounting pole not included.





Both Vantage Vue and Vantage Pro2 integrated sensor suite can be used with Weather Envoy, Envoy8X and Vantage Connect and WeatherLink (see page 20).





Vantage Pro2 Integrated Sensor Suite

Includes all the features of the Vantage Pro2 and Pro2 Plus integrated sensor suites shown on page 7. Can transmit to Vantage Vue and Vantage Pro2 consoles, Weather Envoy, Envoy8X and Vantage Connect. Mounting pole not included.

Wireless Integrated Sensor Suite
6322 with Standard Radiation Shield

6323 with 24-Hour Fan-Aspirated Radiation Shield

6322C with Standard Radiation Shield

Wireless Integrated Sensor Suite Plus with uV and Solarradiationsensors

6327 with standard radiation shield 6328 with 24-hour fan-aspirated radiation shield Cabled Integrated Sensor Suite
Plus with UV and
Solar Radiation sensors*
6327C with Standard Radiation Shield



* Can only be used with a cabled Vantage Pro2 console/receiver

Add special-purpose stations or sensors.

Customize your Vantage Pro2 weather station, Weather Envoy or Envoy8X by adding special-purpose stations and sensors. Each can receive data from up to eight different transmitting stations.



Wireless Leaf & Soil Moisture/Temperature Station

Solar-powered station includes transmitter and backup battery inside weather-resistant shelter. To view the data for up to eight stations, add an Envoy8X and WeatherLink (see chart on page 11). Vantage Pro2 console/receiver or Weather Envoy and WeatherLink can only receive data from either:

- A single fully populated station with two leaf wetness sensors, four soil moisture sensors, and four temperature probes,
- Two partially populated stations, one with two leaf wetness sensors and two temperature probes, and the other with four soil moisture sensors and four temperature probes.

Available in two models. Choose the model without sensors (6345), and add only those you need to meet your requirements. Or choose the Complete Soil Moisture/Temperature Station (6345CS), and add one or two leaf wetness sensors as desired. Compatible with the 6470 Stainless Steel Temperature Probe with Two-Wire Termination.

6345 Wireless Leaf & Soil Moisture/Temperature Station without sensors



6345CS Complete Soil Moisture/Temperature Station

with 4 soil moisture sensors and 4 temperature probes









Wireless Temperature/ Humidity Station

Battery-powered station includes temperature and humidity sensors

inside protective radiation shield, and transmitter and lithium battery inside weather-resistant shelter. Expected

battery life is six to nine months.
To view the data, add a wireless
Vantage Pro2 console/receiver,
Weather Envoy or Envoy8X and
WeatherLink. Includes hardware
for mounting on fence post or pole.
Mounting pole is not included.

6382 Wireless Temperature/ Humidity Station







Anemometer/Sensor Transmitter Kit

With Vantage Pro2, this solar-powered kit allows you to mount the



anemometer in a different location than the integrated sensor suite—up to 1,000 ft. (300m) from your wireless console/receiver. With Envoy8X, you can use this kit with any of our sensors including solar radiation, UV, temperature, anemometer, rain and third-party sensors that report in a range of 0–3 volts. For longer distances, add one or more wireless repeaters. Includes weather-resistant shelter for transmitter, solar panel, battery, and mounting hardware.

6332 Anemometer/Sensor Transmitter Kit



Wireless Temperature Station

Battery-powered station includes stainless steel temperature probe with 25 ft. (7.6 m) cable, transmitter and battery inside weather-resistant shelter, and mounting hardware. To view the data, add a wireless Vantage Pro2 console/receiver, Weather Envoy or Envoy8X and WeatherLink. Expected battery life is six to nine months.



6372 V

Wireless Temperature

Station

















1. Solar Radiation Sensor

To measure solar radiation and solar energy. 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. To mount next to a rain collector, add our Sensor Mounting Shelf (not included).

6450 Solar Radiation Sensor

Includes 2 ft. (0.6 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 125 ft. (38 m) from sensor to integrated sensor suite.

2. UV Sensor

Measures the sunburning portion of the UV spectrum. Allows you to display UV index, dose rate, and daily and accumulated dose. 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. To mount next to a rain collector, add our Sensor Mounting Shelf (not included).

6490 **UV Sensor**

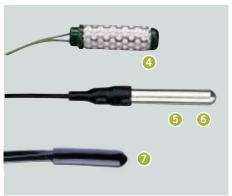


Includes 2 ft. (0.6 m) cable. Uses Standard 4-Conductor. Extension Cable. Maximum cable length is 125 ft. (38 m) from sensor to integrated sensor suite.

3. Sensor Mounting Shelf

For mounting solar radiation and/or UV sensors. Rigid shelf with anodized aluminum posts and stainless steel hardware attaches easily next to the rain collector on the outside of the Vantage Pro2 Integrated Sensor Suite.

6673 Mounting Shelf Sensor



4. Soil Moisture Sensor

Watermark® soil moisture sensor uses electrical resistance to measure the moisture level of the soil. Does not require periodic maintenance during the growing season. Simply bury at the desired depth, then monitor moisture levels throughout the season. Add up to four sensors to a single Leaf & Soil Moisture/Temperature Station. Includes 15 ft. (4.6 m) cable.

6440 Soil Moisture Sensor

5. Stainless Steel Temperature Probe with Two-Wire Termination

Multi-purpose temperature probe with 21/2" (64 mm) long stainless steel housing. Use to measure temperature of air, soil, or water. Add up to four probes to a single Leaf & Soil Moisture/ Temperature Station. Includes 15 ft. (4.6 m) direct-burial cable.

6470 Probe Stainless Steel with

Temperature Two-Wire Termination

NIST





6. Stainless Steel Temperature Probe with RJ Connector

Multi-purpose temperature probe with 21/2" (64 mm) long stainless steel housing. Use to measure temperature of air, soil, or water. Use with Weather Envoy, Envoy8X, and Anemometer/Sensor Transmitter Kit. Includes 25 ft. (7.6 m) cable.

6475 Probe Stainless Steel with RΙ

Temperature Connector





7. Temperature Probe with RJ Connector

Temperature probe with durable plastic housing. Use to measure temperature of air, soil, or water. Use with Weather Envoy, Envoy8X, and Anemometer/Sensor Transmitter Kit. Includes 25 ft. (7.6 m) cable.

6477

Temperature Probe with RJ Connector









8. Anemometer

Includes both wind speed and wind direction sensors. Rugged components stand up to hurricane-force winds, yet are sensitive to the lightest breeze. Wind-tunnel tested to speeds in excess of 180 miles per hour. Sealed stainless steel ball bearings for long life. Comes complete with mounting hardware.

Anemometer

Includes 40' (12 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 250' (76 m) from anemometer to sensor interface module.

9. Leaf Wetness Sensor

Use to monitor the level of surface moisture on foliage, with range from 0 (completely dry) to 15 (saturated). Add up to two sensors to a single Wireless Leaf & Soil Moisture/Temperature Station. Includes 40 ft. (12 m) cable.

6420 Leaf Wetness Sensor



10. Rain Collector

Designed to meet the guidelines of the World Meteorological Organization, our self-emptying rain collector with tipping bucket is exceptionally accurate. Measures in 0.01" or 0.2 mm increments. Includes 40 ft. (12 m) cable.

7852 Rain Collector

Uses standard 4-conductor extension cable. Maximum cable length is 900 ft. (270 m) from rain collector to console, including junction box cable. See page 17 for extension cable options.

11. Universal **Anemometer Interface**

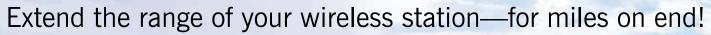
Now you can use an R.M Young or NRG anemometer with your Davis system. This interface adapts certain third-party anemometers to report to a Vantage Pro2 Integrated Sensor Suite or Anemometer/Sensor Transmitter Kit. It has been tested with the R. M. Young anemometer model number 05103 and with the NRG anemometer, model 1900 NRG #40C. However, the interface is not limited to those products. Solar powered with lithium battery backup.

6336 Universal Anemometer Interface









For longer distances or to improve reception in troublesome areas, add one or more wireless repeaters. Use repeaters in a daisy chain, retransmitting from a single Vantage Pro2 or Vantage Vue Integrated Sensor Suite or special-purpose station. Or build a network of repeaters and wireless stations, with some repeaters listening to multiple stations, each with their own unique ID. For use with any Davis wireless transmitter and receiver.

Long-Range Wireless Repeaters

In our testing, we achieved an incredible four miles (6.4 km) of transmission distance using two of our long-range repeaters with Yagi antennas. We can't promise that you'll achieve quite the same results, since range is highly variable depending on antenna height, the terrain and foliage, buildings and other man-made structures, and RF interference. But we still think you'll be impressed! Ideal for agricultural or research applications where long distances are an issue. AC-powered model includes power adapter and lithium backup battery. Solar-powered model includes solar panel and lithium backup battery. Antennas are sold separately.

Long-Range Repeater, AC-Powered 7653

7654 Long-Range Repeater, Solar-Powered



*
* 1

Long-range repeater with one Yagi and one Omni antenna.

REPEATER DISTANCES										
Antenna Combination	Multiplier	Maximum Transi under optimal co	mission Distance anditions **							
Dipole – Dipole *	1.00	1000 ft.	0.2 mile	300 m						
Dipole – Omni	1.58	1580 ft.	0.3 mile	475 m						
Dipole – Yagi	3.16	3160 ft.	0.6 mile	950 m						
Omni – Omni	2.50	2500 ft.	0.5 mile	750 m						
Omni – Yagi	5.00	5000 ft.	1.0 mile	1500 m						
Yagi – Yagi	10.00	10,000 ft.	1.9 miles	3000 m						

- Dipole antennas are found on all of our wireless weather stations and on our standard repeaters.
- Typical distance will be less. Outdoors, line of sight with minor obstructions or interference, typical distance is about 50-80% of the maximum. Through walls or in areas with high RF interference, typical distance may be as low as 20-40% of the maximum.



Antennas for Long-Range Repeaters

For use with our long-range repeaters. Each repeater requires two antennas: one to receive data, and another to retransmit it. Omni antennas transmit or receive in all directions. Yagi antennas transmit or receive from a single direction, but have a longer transmission distance. Mix and match to suit your needs, using the table above.

7656	Omni	Antenna
7660	Voci	Antonn

Note: FCC regulations require that U.S. customers select from the antennas above; customers outside the U.S. must purchase third-party antennas in compliance with local regulations.



Standard Wireless Repeaters

Ideal for most applications. Uses the same dipole antenna found on all of our wireless stations. Range is up to 1,000 ft. (300 m) outdoors, line of sight. Typical range through walls under most conditions is 200 ft. to 400 ft. (60 to 120 m). AC-powered model includes power adapter. Solarpowered model includes solar panel and lithium backup battery.

7626 Standard Wireless Repeater, AC-Powered

Standard Wireless Repeater, Solar-Powered



Installing your Vantage Vue or Vantage Pro2 console, Weather Envoy or Envoy8X outside?

Add solar power and shelter.



1. Solar Power Kit for Wireless Consoles or Wireless Weather Envoy

Powers the wireless console/receiver or Weather Envoy. (Outdoor sensors are powered by the solar panel that is included with the station.) Includes solar panel, regulator circuit, rechargeable battery, and 20 ft. (6 m) cable.

6610 Solar PowerKit for Wireless Consoles or Weather Envoy

2. Solar Power Kit for Cabled Consoles, Cabled Weather Envoy or Envoy8X

Powers both the console (or Cabled Weather Envoy) and the outdoor sensors. Includes solar panel, regulator circuit, rechargeable battery, 16 ft. (4.9 m) cable and hardware to attach to a vertical mounting pole. Can also be used to power the Envoy8X.

7707 Solar Power Kit for Vantage Cabled Pro2, Cabled Weather Envoy Envoy8X



3. Complete System Shelter

Protects console and other components located outside at a field or remote location. Weatherresistant NEMA 4X enclosure provides protection from the elements for the Vantage Pro2 console/ receiver or the Vantage Vue console/receiver with or without WeatherLink. Measures 151/2" × 73/4" $\times 13^{1/2}$ " (395 $\times 195 \times 345$ mm).

7724 Complete System Shelter

4. Multi-Purpose Shelter

Use to shelter the Weather Envoy or Envoy8X with WeatherLink data logger. Measures 33/4" × $9\frac{1}{2}$ " × $12\frac{1}{2}$ " (95 × 240 × 320 mm).

7728 Multi-Purpose Shelter

5. Telephone Modem Adapter

For transmission of data from any of the serial port versions of our WeatherLink data loggers using a modem.

6533 Telephone Modem Adapter for WeatherLink Vantage Vue, for Vantage Pro2, and Weather Envoy. (Not for use with Envoy8X.)



For use in cold climates to measure freezing rain or the moisture content of snowfall. Requires access to AC power; cannot be run using a solar power kit. Includes 24-watt, 24-volt heater with thermal cut-off switch, control unit, insulating reflective blanket, and AC-power adapter. (For Vantage Pro2 or Anemometer/Sensor Transmitter Kit as Rain Station only.)

Rain Collector Heater Includes 50 ft. (15 m) cable. Use Shielded 4-Conductor

Extension Cable. Maximum cable length is 120 ft. (36 m).

7. Radiation Shield

The most effective passive shelter available. Protects temperature sensor from solar radiation and other sources of radiated and reflected heat. Multi-plate construction for maximum airflow. Assembly required.

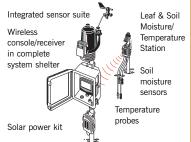
Radiation Shield

For Wireless Temperature Station or Leaf & Soil Moisture/ Temperature Station and all temperature sensors.

		Current Draw in milliamperes Estimated Backup Battery Life in Days*									80-Amp Car Battery Life at normal temperatures							
CURRENT & BATTERY		lights	lights		with data	ogger	without		with data lo	ogger	without		with data l	ogger				
W DATTERT EITE		off	on	standard	streaming	WeatherLinkIP	data logger	standard	streaming	WeatherLinkIP	data logger	standard	streaming	WeatherLinkIP				
Vantage Vue Console/Receiver		1	160	1	3	101	9 months	9 months	3 months	2 days	9 years	9 years	3 years	30 days				
	Wireless	1	160	1	3	101	9 months	9 months	3 months	2 days	9 years	9 years	3 years	30 days				
Vantage Pro2	Cabled	10	170	10	13	110	27 days	27 days	21 days	2 days	9 months	9 months	8 months	30 days				
Weather	Wireless	1	N/A	1	3	101	N/A	4 months	1 month	<1 day	N/A	9 years	3 years	30 days				
Envoy	Cabled	10	N/A	10	13	110	N/A	10 days	8 days	<1 day	N/A	6 months	6 months	30 days				
	1 ID	N/A	N/A	1	N/A	N/A	N/A	4 months	N/A	N/A	N/A	9 years	N/A	N/A				
Envoy8X	4 IDs	N/A	N/A	1.6	N/A	N/A	N/A	2 months	N/A	N/A	N/A	4 years	N/A	N/A				
	8 IDs	N/A	N/A	2.5	N/A	N/A	N/A	1 month	N/A	N/A	N/A	2.7 years	N/A	N/A				

^{*} Information based on premium alkaline batteries. Actual battery life will vary depending on station setup and usage. N/A = not applicable.

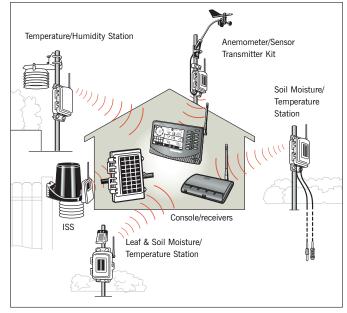
FIELD STATION SHOWING SOLAR POWER KIT & SOIL MOISTURE SENSORS



WIRELESS VANTAGE PRO2

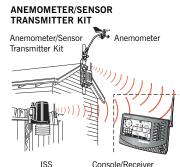


Each Vantage Pro2, Weather Envoy, Envoy8X and Vantage Connect console/receiver can receive data from up to eight different transmitting stations.



REMOTE ANEMOMETER





\$70

(30 m) (61 m) \$25

50' (15 m) 8

Ê

EXTENSION CABLES

Cable Connections

Our standard 4-conductor cable includes waterproof coupler kits for joining two cables together, indoors or out. You can also join all our cables using surge protectors.

WeatherLink Cables

The extension cables listed are for the serial port versions of WeatherLink only. USB extension cables are not available from Davis Instruments and must be purchased from a computer supplier.

Anemometer Cables

Included Cable Length Maximum Cable Length Wireless Vantage Pro2 40' (12 m) For Anemometer to Integrated Sensor Suite, see note above.		7876-100 Standard 4-Conductor,		7895-050 Shielded 4-Conductor, 50' (15 m)	
Wireless Vantage Pro2 40' (12 m) For Anemometer to Integrated Sensor Suite, see note above			ı Ca	able	•
10 (12 III) 101 Michigana contact dutte, 300 Hote above.	•	•	•		
Cabled Vantage Pro2 40' (12 m) For Anemometer to Integrated Sensor Suite, see note above. 100' (30 m) 100' (300 m) from console to Integrated Sensor Suite. • (See descriptions above.)	•	•	•		
WeatherLink for Vantage Pro2 8' (2.5 m) 48' (14.6 m) from data logger to serial port. (Serial port versions only.)	•				
Solar Radiation Sensor 2' (0.6 m) 125' (38 m) from sensor to Integrated Sensor Suite.	•	•			
UV Sensor 2' (0.6 m) 125' (38 m) from sensor to Integrated Sensor Suite.	•	•			
Stainless Steel Temperature Probe with Two-Wire Termination 15' (4.6 m) 800' (242 m) from probe to Wireless Leaf & Soil Moisture/ Temperature Station.				•	•
Stainless Steel Temperature Probe with RJ Connector 25' (7.6 m) Probe with RJ Connector 25' (7.6 m) Anemometer/Sensor Transmitter Kit.	•	•	•		
Probe with RJ Connector Temperature Probe with RJ Connector Anemometer/Sensor Transmitter Kit. 25' (7.6 m) Anemometer/Sensor Transmitter Kit. 200' (61 m) from probe to Weather Envoy, Envoy8X, or Anemometer/Sensor Transmitter Kit.	•	•	•		
Leaf Wetness Sensor 40' (12 m) 200' (61 m) from sensor to Wireless Leaf & Soil Moisture/ Temperature Station.	•	•	•		
Soil Moisture Sensor 15' (4.6 m) 1000' (300 m) from sensor to Wireless Leaf & Soil Moisture/ Temperature Station.				•	•
Anemometer 40' (12 m) 240' (73 m) from sensor to Integrated Sensor Suite or Anemometer/Sensor Transmitter Kit. See note above.	•	•	•		
Rain Collector 40' (12 m) 900' (270 m) from collector to Anemometer/Sensor Transmitter Kit.	•	•	•		
Rain Collector Heater 50' (15 m) 120' (36 m) from power unit to AC-power adapter. Requires terminal block.				•	•

MAXIMUM NUMBER OF EACH STATION TYPE (TOTAL # OF STATIONS CANNOT FXCFFD 8)

(TOTAL # OF OTATIONO OFWINIOT EMOLED OF										
	Shown or	Lagged by								
Transmitting Station	Vantage Pro2	Vantage Vue	Logged by WeatherLink							
Integrated Sensor Suite	1	1	1							
Anemometer/Sensor Transmitter Kit	1	0	1							
Leaf & Soil Moisture/ Temperature Station	2*	0	2*							
Temperature Station	8	0	3**							
Temperature/Humidity Station	8	0	2**							

- One fully-populated station or two partiallypopulated stations.
- ** WeatherLink will log a maximum of A) 3 Temperature Stations or B) 2 Temperature Stations and 1 Temperature/Humidity Station or C) 1 Temperature Station and 2 Temperature/Humidity Stations.

Surge Protector

For upgraded electrical circuit protection, use 2 surge protectors with each of our 4-conductor cables.



7767 Protector Surge

Surge Protector Shelter

Weather-resistant shelter houses two surge protectors (sold separately).

7768 **Protector Shelter** Surge





WIRELESS TRANSMITTERS

What sensors can you use with your transmitter?

See pages 11 and 17 for the maximum number of transmitters that can report to a single Vantage Pro2 console/receiver, Weather Envoy, or Envoy8X.

4	Included Optional Maximum sensors for that transmitter		6250 Vantage Vue 6357 Vantage Vue ISS	Vantage Pro2 Vantage Pro2 ISS	6153 Vantage Pro2 with Fan-As 6323 Vantage Pro2 ISS with Far	6162 Vantage Pro2 Plus 6327 Vantage Pro2 Plus ISS	6163 Vantage Pro2 Plus with Fan- 6328 Vantage Pro2 Plus ISS with	Leaf Wetness & Soil Moist	5345CS Complete Soil Moisture,	5372 Temperature Station	Temperature/Humidity Sta	6332 Anemometer/Sensor Trans
		Product No.	6250	6152	6323	6162	6163 \	6345	63450	6372	6382	6332
	Integrated Rain Collector		•	•	•	•	•					
	Rain Collector	7852										•
	Integrated Anemometer		•									
	Detachable Anemometer	6410		•	•	•	•					•
	Integrated Temperature/Humidity		•	•	•	•	•				•	
ies	Stainless Steel Temperature Probe with Two-Wire Termination	6470						4	4			
SSOF	Temperature Probe with RJ Connector*	6477										•
Accessories	Stainless Steel Temperature Probe with RJ Connector*	6475								•		•
and '	Passive Radiation Shield	7714	•	•		•		•	•	•	•	•
	Daytime Fan-Aspirated Radiation Shield	7747		•		•					•	
Options	24-Hour Fan-Aspirated Radiation Shield				•		•					
Sensor	Solar Radiation Sensor	6450			•	•	•					•
Sel	UV Radiation Sensor	6490			•	•	•					•
	Sensor Mounting Shelf for UV/Solar	6673			•	•	•					
	Leaf Wetness Sensor	6420						2	2			
	Soil Moisture Sensor	6440						4	4			
	Third-Party Sensors (reporting 0-3 volt DC, Envoy8X required)			•	•	•	•	•	•			•
	Universal Anemometer Interface	6336		•	•	•	•					•

Can also be used with Weather Envoy and Envoy8X to replace the internal temperature sensor.

Handheld wind speed indicators.

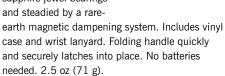
WindScribe™

Ultrasonic wind meter reads wind speed, 5-second average, and running average. Select from mph, km/h, fpm, m/s, f/s, or knots, plus temperature and wind chill in tenths of °F or °C. Sensitive to breezes as low as 0.4 mph (.64 km/h), and as high as 150 mph (241 km/h). Includes 3-volt lithium battery. 3.5 oz (100 grams).

276 WindScribe

Wind Wizard™

Reads wind speed in mph, m/s, and Beaufort. Readout dial is supported on sapphire jewel bearings



281 Wind Wizard

Turbo Meter™

Reads wind speed in mph, knots, fpm, or m/s. Turbine suspended on sapphire jewel bearings responds to the lightest of winds. Threedigit display offers excellent viewing contrast both in bright sunlight and at night. Requires three AAA alkaline batteries (not included). 3 oz (85 g) not including batteries.

271 Turbo Meter

CABLED



SYSTEMS & RECEIVERS

WIRELESS

What transmitters can you use with your receiver?

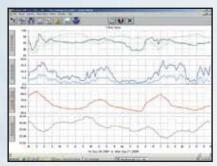
trans	pages 11 and 17 for the maximum number of mitters that can report to a single Vantage Pro2 ple/receiver, Weather Envoy, or Envoy8X.
•	Included Optional

•	Optional Included but additional can be added		6250 Vantage Vue	Vantage Pro2	6153 Vantage Pro2 wi	Vantage Pro2 Ple	6163 Vantage Pro2 Plus	6316 Wireless Weathe	6318 Envoy8X	6620 Vantage Connect	Vantage Vue Cor	6312 Vantage Pro2 Co	6152C Vantage Pro2	C Vantage Pro2	C Cabled Weath
		Product No.		6152	6153	6162	6163	6316	6318	6620	6351	6312	61520	6162C	6316C
	Vantage Vue Console/Receiver	6351	%	•	•	•	•	•			•	•			
	Vantage Vue ISS	6357	•					•	•	•	•	•			
	Wireless Vantage Pro2 Console/Receiver	6312	•	7.	7.	7.	7.	•			•	•			
	Wireless Vantage Pro2 ISS	6322		•				•	•	•	•	•			
	Wireless Vantage Pro2 ISS with 24-Hr Rad Shield	6323			•			•	•	•	•	•			
	Wireless Vantage Pro2 ISS with UV-Solar	6327				•		•	•	•	•	•			
	Wireless Vantage Pro2 ISS with 24-Hr Rad Shield & UV Solar	6328					•	•	•	•	•	•			
Options	Wireless Weather Envoy	6316	•	•	•	•	•	•			•	•			
opt	Wireless Leaf & Soil Moisture/Temp Stations	6345		•	•	•	•	•	•	•		•			
Wireless	Complete Soil Moisture/Temperature Station	6345CS		•	•	•	•	•	•	•		•			
Wir	Wireless Temperature Station	6372		•	•	•	•	•	•	•		•			
	Wireless Temperature/Humidity Station	6382		•	•	•	•	•	•	•		•			
	Anemometer/Sensor Transmitter Kit	6332		•*	•*	•*	•*	•*	•	•		•			
	Standard Wireless Repeater, AC-Powered	7626	•	•	•	•	•	•	•	•					
	Standard Wireless Repeater, Solar-powered	7627	•	•	•	•	•	•	•	•					
	Long-Range Wireless Repeater, AC-Powered	7653	•	•	•	•	•	•	•	•					
	Long-Range Wireless Repeater, Solar-Powered	7654	•	•	•	•	•	•	•	•					
	Solar Power Kit, Wireless	6610	•	•	•	•	•	•		•	•	•			
ons	Cabled Weather Envoy	6316C													•
Opti	Cabled Vantage Pro2 ISS	6322C											•		•
Cabled Options	Cabled Vantage Pro2 ISS with UV & Solar	6327C												•	•
Cat	Solar Power Kit, Cabled	7707							•				•	•	•
	Rain Collector Heater	7720		•	•	•	•						•	•	
	Mounting Tripod	7716	•	•	•	•	•			•			•	•	
tions	Mounting Pole Kit	7717	•	•	•	•	•			•			•	•	
Opti	Complete System Shelter	7724	•	•	•	•	•	•	•		•	•	•	•	•
Installation Op	Multi-Purpose Shelter	7728						•	•						•
talla	Daytime Fan-Aspirated Radiation Shield	7747		•		•							•	•	
Ins	Sensor Mounting Shelf	6673		•	•	•	•						•		
	Surge Protector	7767		•	•	•	•						•	•	•
	Surge Protector Shelter	7768		•	•	•	•						•	•	•

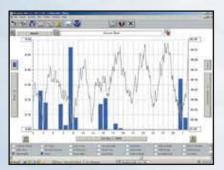
^{*} Only when used as a separate transmitter for your station's anemometer

Your weather data, your computer. What could be better?

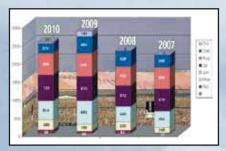
For the ultimate in weather monitoring, add WeatherLink to any of our weather stations. The data logger fits neatly into the weather station console, Weather Envoy or Envoy8X, storing weather data even when it's not connected to your PC. Later, download the data and use the software for detailed analysis and graphing. Available in eight different models. Our popular WeatherLink with standard data logger is ideal for most purposes, while other models add special features designed for specific user groups.



Graph data on a daily, weekly, or yearly basis.



View multiple weather variables at the same time to see their relationships.



Use WeatherLink to export your data and create your own custom reports.

Expanded Reporting

- More Weather Data. View weather information not available on the console, including heating degree days, cooling degree days, and fuel-oil
- Optional Sensor Reporting. With optional UV and solar radiation sensors, get details on sunburn risk and solar energy.

Sharing Your Weather Data

- Create Your Own Reports. Data can be exported to most popular spreadsheets, databases, and word processing programs.
- Weather Web Site. Create a weather web site or post weather conditions to a LAN. Add graphs, text lines, or scrolling ticker-tapes, and upload other files (such as webcam images) along with weather data.
- · Weather World 'Round. Add your weather data to our growing list of members and their stations at www.davisnet.com/weather/cool/world.asp
- Citizen Weather Observer Program. Submit your data to the National Weather Service to help develop improved weather prediction models. www.wxqa.com
- The GLOBE Program. Participate with other schools in an international weather-related program for students from elementary through high school. www.globe.gov

Data Storage & Transfer

- User-Selectable Storage Interval. Choose 1, 5, 10, 15, 30, 60, or 120 minutes. Store up to six months' worth of data depending on the storage interval.
- Standard Data Logger Models. Log and store data, even when the data logger is not connected to your PC. Transfer the data as often as you like, or leave the software running to transfer it automatically each day.
- · Internet Protocol (IP) Model. Lets you see your weather data live on the Internet within minutes. No web skills or complicated setup required-WeatherLinkIP does all the work for you!
- · Alarm Output & Irrigation Control Models. Both include our standard data logger plus a connector block that allows you to connect to your irrigation system, or to a heater, fan, or other device.
- Streaming Data Logger Models. Provide a continuous stream of data to a PC or to a ham radio with a TNC modem.



Data logger fits neatly into all Vantage Pro, Vantage Pro2, Vantage Vue, and Envoy models. (Appearance varies depending on model.)

WeatherLink with Standard **Data Logger**

Our most popular models, for everyone from the home weather buff to the most demanding scientific user. Available in versions for both PC and Mac. (Mac versions do not include all features; see the "Notes" in the chart on page 23.) All models include data logger, download cable, software on CD, Getting Started Guide, and on-line help.

WeatherLink Vantage Pro2 Vantage and Vue 6510USB Windows USB Version 650SER Windows Serial Version 6520 Mac® OS X Version





WeatherLink USB data logger installed in Vantage Pro2 Console/Receiver.



NEW!

Free iPhone App. Vantage Connect and WeatherLinkIP users can see the data on their phones. Use WeatherLinkIP or Vantage Connect to join and share your weather data on our network. Search for WeatherLink on iTunes.

Easily view your weather data on the web.

WeatherLinkIP

Now you can post your weather data directly to the Internet without a PC! Not a web guru? Don't worry—WeatherLinkIP does all the work for you. Simply plug the data logger into the back of your Vantage Pro2 or Vantage Vue console, or Weather Envoy and connect the cable to your cable/DSL router. Within minutes, you'll be able to see your weather data live on the Internet. In addition, WeatherLinkIP™ lets you:

- · Automatically upload data to third-party weather sites including CWOP (Citizen Weather Observer Program), the GLOBE Program, and more.
- Get e-mail alerts of current weather conditions or simple alarm conditions.
- Download the data to your PC for all the same powerful charting, graphing, and analysis as our standard WeatherLink. With Extra User License Kits, you can even download the data independently to multiple PCs—ideal for schools, agriculture, scientific fieldwork, and remote locations.

WeatherLinkIP is "plug-and-play," so it will work straight out of the box without additional configuration in most situations. Simple configuration steps are required to upload to third-party weather sites or set e-mail alert conditions. Not compatible with Envoy8X.

> LOW 40°F NNE 4 Mph

6555 WeatherLinkIP





Wind





Be part of a global weather network and see weather conditions worldwide.

High Gust 8 Man at 2:14 AM

Davisi.

NEW!

Integrated Pest Management Module for Grapes

The new Integrated Pest Management Module for Grapes provides the final step in linking your weather data to actual pest risk, giving you a powerful new tool in the battle against crop pest damage.

This add-on module works with WeatherLink for Windows and Vantage Pro2 to gather real-time temperature, humidity, rain and leaf wetness data and generate stepped risk levels to warn you when conditions are favorable for pest development. The software comes loaded with pest models for all known grape pests, including diseases, insects and mites. (You may delete pests not present in your area.) You will see at a glance when conditions are favorable for insect pests reaching a damaging stage of growth, or for disease development to occur. A color-coded spreadsheet puts the highest risk potential pests at the top of the list and highlights them in red. Because you configure the software to reflect pests present in your area and use real-time data from your own vineyard weather sensors, the software's updated pest development algorithms will provide you with the most accurate, vineyard-specific risk assessment available.

6571 Integrated Pest Management Module for Grapes

REQUIRES: Vantage Pro2

Vantage Pro2 or Vantage Pro2 Plus and WeatherLink for Windows (any model), version 5.5 or later. Compatible with Weather Envoy and Envoy8X.

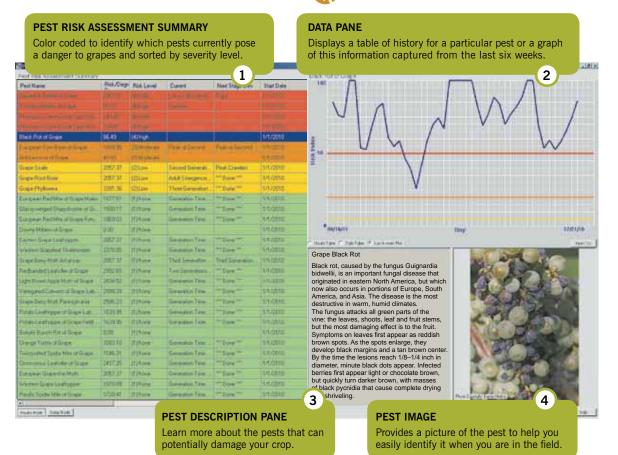
All disease models also require a Leaf Wetness Sensor on a Wireless Leaf & Soil Moisture/Temperature Station.

DISEASES PREDICTED

- Anthracnose
- Black Rot
- · Botrytis Bunch Rot
- Downy Mildew
- Phomopsis Cane & Leaf Spot
- · Powdery Mildew

INSECTS & MITES PREDICTED

- Eastern Grape Leafhopper
- European Corn Borer
- European Grapevine Moth
- European Red Mite
- Glassy-winged Sharpshooter
- Grape Berry Moth
- Grape Phylloxera
- Grape Root Borer
- Grape Scale
- Japanese Beetle
- Light Brown Apple Moth
- Omnivorous Leafroller
- Orange Tortrix
- Pacific Spider Mite
- Potato Leafhopper
 Redbanded Leafroller
- Twospotted Spider Mite
- · Variegated Cutworm
- Vine Mealybug
- Western Grape Leafhopper
- Western Grapeleaf Skeletonizer



Agricultural/Turf Management Software Module

Optional software module adds specialized reports for farmers, growers, and turf managers, with user-defined growing season and 24-hour period. You'll get evapotranspiration, chilling requirement, leaf wetness hours, and soil temperature hours. Plus growing degree-days and temperature-

temperature hours. Plus growing degree-days and temperatur humidity hours and crop water management (with irrigation values and user-entered K-factor profiles).

For use with all WeatherLink models except Mac versions. Some reports require the use of optional sensors. Evapotranspiration reports require the use of solar radiation sensor.

Agricultural/Turf Management Module



Note: Add-on software

modules (6571, 6511, 6512) must be used with

WeatherLink. All models

work with Vantage Pro2.

For other stations, refer to chart on page 23.

E-Mail/Phone Alert Software Module

Be alerted whenever conditions approach critical—24 hours a day, 7 days a week. Choose e-mail for detailed information on alarm conditions plus regularly scheduled updates on current weather conditions. Use the alert

to send a text to your cell phone. Or choose the phone alert, with a special alarm tone telling you to check your weather station console or WeatherLink for details.

For use with all WeatherLink models except Mac versions. Because systems vary, the phone alert may not work outside the USA.

6512 E-Mail/Phone Alert Module



6511

Critical real-time data right when you need it.

WEATHERLINK WITH CONNECTOR BLOCKS

WeatherLink for Alarm Output with Connector Block

Now you can automatically turn heaters, fans, and other devices on or off using your weather station. For each of four outputs, you can enter up to eight different weather parameters. Enter threshold values for each, select from nine different test conditions, and link the entries together as you choose. For example, you could activate a fan to cool your house—but only if the difference between the inside and outside temperatures is more than 5° F, it's more than 72° F inside, and it's between 5:00 p.m. and 6:00 a.m. Our connector block provides the interface between your weather station and an electrical device. For high-power devices, you may also need to add electrical relays (not supplied by Davis). Connection to a PC is not required except for initial setup.

6544 WeatherLink for Alarm Output



WeatherLink for Irrigation Control with Connector Block

Use your weather station to turn your irrigation system on or off automatically. Connector block connects directly to most irrigation systems including Rain Bird®, Rain Master®, and Toro®. For industrial controllers, provides electronic pulses for wind, rain, and ET. For homeowners, looks at rain and ET values to determine when to inhibit watering. Can also set console alarms to inhibit watering when temperatures are too low or winds are too high. ET monitoring requires solar radiation sensor. Connection to a PC is not required except for initial setup.

6560

WeatherLink for Irrigation Control



WEATHERLINK STREAMING DATA LOGGERS

WeatherLink for Emergency Response Teams with Streaming Data Logger and CAMEO link

For use with the free CAMEO® (Computer-Aided Management of Emergency Operations) software developed by NOAA and the EPA. With Vantage Pro2, Vantage Vue, or Weather Envoy, provides the real-time weather data needed to map the footprint of a hazardous plume, predict its dispersion, and help make critical public safety decisions—all at just a fraction of the cost of other systems. For more about CAMEO, visit www.epa.gov/emergencies/content/cameo/index.htm.

6550 WeatherLink for Emergency Response Teams



WeatherLink for APRS with Streaming Data Logger

For ham radio operators, including storm chasers and volunteer weather watchers. Connects a Vantage Pro2 console, Vantage Vue console, or Weather Envoy to a ham radio with TNC modem for instant transmission of both your location and the local weather conditions via APRS. Connection to a PC is not required except for initial setup.

6540 WeatherLink for APRS



Choose the WeatherLink model that suits your needs.

To get the most out of WeatherLink, choose the model that's right for you. All share the powerful weather data logging and reporting features discussed on page 20, while some add special features designed for specific user groups.

Extra User License Kit includes software on CD and extra user license.

SYSTEM REQUIREMENTS	MODEL	FOR USE WITH	DESIGNED FOR	NOTES	EXTRA USER LICENSE KIT	
Windows, USB Windows XP and above	6510USB	Vantage Pro2, Vantage Vue, Weather Envoy or Envoy8X	General Purpose	For PCs with USB connections	6510X	
Windows, Serial Windows XP and above	6510SER	Vantage Pro2, Vantage Vue, Weather Envoy or Envoy8X	General Purpose	For PCs with serial port connections.	6510X	
All models with streaming data loggers or connector blocks include all our normal Weathert ink features, plus additional features designed for special purposes. To download one of these models via USB, add our # 8434 USB-to-Serial Cable \$20	6540	Vantage Pro2, Vantage Vue, or Weather Envoy	APRS (Ham Radio)	Connects to a ham radio with TNC modem for instant streaming transmission of both your location and the local weather conditions via APRS (Automatic Position Reporting System).	6510X	
	6544	Vantage Pro2, Vantage Vue, or Weather Envoy	Alarm Output	Use to turn heaters, fans, or other devices on or off depending on weather conditions. (For high-power devices, you may also need to add electrical relays.) Includes connector block.	6510X	
	6550	Vantage Pro2, Vantage Vue, or Weather Envoy	Emergency Response	For use with the free CAMEO* software developed by NOAA and the EPA (not included). Provides streaming weather data to map a hazardous plume and predict its dispersion.	6510X	
	6560	Vantage Pro2, Vantage Vue, or Weather Envoy	Irrigation Control	Connects to Rain Bird [®] , Rain Master [®] , Toro [®] , and others. Provides electronic pulses for wind, rain, and ET, or uses the alarm settings in the console. Includes connector block.	6510X	
Internet DSL or cable connection and router with free ethernet port. Windows XP and above	6555	Vantage Pro2, Vantage Vue, or Weather Envoy	Internet Updates	View downloaded data on your own weather web site and be part of the WeatherLinkIP community.	6510X	
Mac Mac OS X v 10.1 or above, Intel Mac Compatible	6520	Vantage Pro2, Vantage Vue, or Weather Envoy	General Purpose	Does not log data from leaf wetness, soil moisture, solar radiation, or UV sensors. Does not include Citizen Weather Observer or GLOBE capabilities. May not be used with E-Mail/Phone Alert or Agricultural/Turf Management Modules.	6520X	

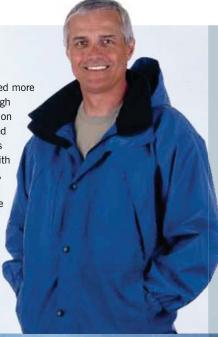
How Will You Use Your Weather Station?

Davis weather stations are used around the world to keep weather observers informed. While real user stories are highlighted in our Davis E-Newsletter, we've created a few "typical" customers to give you an idea of the many ways you can create the perfect weather system.

The Weather Buff

He loves to watch the weather, and over the years has installed more than one drugstore thermometer on his patio. He wanted a high quality weather station that could give him accurate readings on wind, temperature, humidity, barometer, and rain, all displayed clearly on a console—while staying within his budget. He was impressed with how simple Vantage Vue was to install and with all the information it provided on the console—historical data, forecast icons, and graphs—and the Weather Center's extra information. He added WeatherLinkIP and learned how simple it was to upload his data to the internet.

- Affordable
- Easy to install
- · Add WeatherLinkIP for simple online sharing



THE BUFF'S SYSTEM

Vantage Vue, 6250

Mounting Pole Kit, 7717

WeatherLinkIP, 6555

ON HIS WISH LIST

Additional console for the garage, 6351

The Professional Weather Watcher

He is serious about the weather. He wanted weather readings that could be reported to NOAA and CWOP. He liked the Vantage Vue, but chose the Vantage Pro2 system so that he could mount the anemometer on a 30' tower while keeping his rain and other sensors at 6'. He knew a Davis weather

station would be durable—a very important fact because he lives where summers are hot, winters are snowy, and the hurricane force winds are a late summer highlight. He chose the Vantage Pro2 with 24-hour Fan-Aspirated Radiation Shield and added a Rain Collector Heater. Living where weather can do some serious damage, he wanted to help his community prepare for severe weather via his web site and his ham radio, so he added WeatherLinklP. He wanted to see his data in the living room as well as in his radio shack, so he added a Vantage Vue console. He also wanted to monitor the temperature of the pond that is 1500 feet from his back deck, so his latest addition to his system was a wireless Temperature/Humidity Station and a standard wireless repeater.

- Separable sensors for greatest wind accuracy and professional siting
- · Ability to add special purpose stations
- UV and Solar sensors available
- Can download data from WeatherLinkIP for NOAA and CWOP reporting

THE PRO'S SYSTEM

Vantage Pro2 with 24-Hour Fan-Aspirated Shield, 6153

Mounting Tripod, 7716

Mounting Pole Kit, 7717

WeatherLinkIP, 6555

Rain collector heater, 7720

Wireless Temperature Station, 6372

Standard Wireless Repeater, solar powered, 7627

Vantage Vue console, 6351

ON HIS WISH LIST

Solar and UV Radiation Sensors with shelf, 6450, 6490, & 6673



The Vintners

They found the perfect vineyard on a rolling hillside and sank their savings into the dream of raising grapes and producing award-winning wines. Even though their climate, with its foggy, cool summers, mild winters and infrequent frosts, is ideal, they still have to make the daily weather-based decisions that determine the success—or failure—of their crop. They needed real-time data from their own vineyard's micro-climate, which happens to be miles from their office; miles from anything in fact! They chose a Vantage Pro2 Plus system and installed new Vantage Connect to bring that remote station's data right into their office via a cellular connection. They use WeatherLink software to log and store data to use in future growing seasons. They added a Wireless Leaf & Soil Moisture Temperature Station to aid in irrigation decisions and the Integrated Pest Management Module for Grapes to manage pests before damage occurs. They dream of expanding their vineyard and adding weather stations in remote fields. They need the durability, accuracy, and update speed of Davis stations; and the flexibility to grow and add on to their system offered by the Vantage Pro2.

· Full agricultural functionality

Real-time data communicated via cellular connection from a remote station

UV and solar sensors provide ET data for use in irrigation

 Integrated Pest Management Module includes ALL grape pests

 WeatherLink data archives enhance this and future growing seasons



THE VINTNER'S SYSTEM

Vantage Pro2 Plus with 24-Hour Fan Aspirated Radiation Shield, 6163



Mounting tripod, 7716

Vantage Connect, 6620

Wireless Leaf & Soil Moisture Temperature Station, 6345

2 Leaf Wetness Sensors, 6420

4 Soil Moisture Sensors, 6440

2 Stainless Steel Temperature Probes with Two-Wire Termination, 6470

Integrated Pest Management Module for Grapes, 6571

Vantage Connect service plan with 15-minute update interval, 6634

ON THEIR WISH LIST

A really good growing season

The Wind Researcher

She's a researcher overseeing graduate students who are studying wind energy. Her team needed wind data from several sites to see how wind moves through the campus. She started with the Vantage Pro2 on the roof of the biology building, and then added two Vantage Vue integrated sensor suites about 800 feet apart, along with a long-range repeater. Her colleagues were interested in not only the wind data, but the temperature and humidity data as well. When her team decided three anemometers

were not quite enough, they asked for more. But with three different consoles reporting the data, it was already a time-consuming process to compile the data into one useful database. Enter our new Envoy8X, which allowed her to install five more Davis anemometers with Anemometer/Sensor Transmitter Kits. Using long-range repeaters, all eight stations are logged by one Envoy8X. One database with data from all the anemometers plus the additional sensor data from the three integrated sensor suites is just what her team needed.

• Can log 8 stations, including multiple anemometers and integrated sensor suites

 Flexibility to handle radio transmission obstacles

Envoy8X software with commercial grade database capabilities

· Ability to use third-party sensors

Additional Envoy8Xs can be added

THE RESEARCHER'S SYSTEM

Vantage Pro2 Plus with 24-Hour Fan Aspirated Radiation Shield, 6163



2 Vantage Vues, 6250

3 Mounting Tripods, 7716

5 Anemometer/Sensor Transmitting Kits, 6332

5 Anemometers, 6410

5 Mounting Pole Kits, 7717

Envoy8X, 6318

2 Long-Range Repeaters, Solar-Powered, 7654

2 Omni Antennas, 7656

2 Yagi Antennas, 7660

2 Mounting Pole Kits, 7717

WeatherLink, 6510USB

ON HER WISH LIST

Another Envoy8X for more anemometers

Vantage HUMIDITY RΔIN **TEMPERATURE** WIND WITH OPTIONAL SENSORS Console **Features** Rain Storm Amount nside Temperature Outside Humidity nside Humidity Rainfall Amount Vantage Pro2 and Vantage Vue Dew Point Wind Chill Vantage Pro2 only Outside Vantage Vue only sec min Update Interval * **CONSOLE DISPLAYS** Reading at end of update interval Total amount for the interval Average reading for the interval High reading for the interval **SET ALARMS FOR** Special Alarms High Reading Low Reading **DISPLAYED BUT NOT GRAPHED** Current Year High Current Year Low GRAPHED & DISPLAYED FOR LAST 24 OF EACH OF THE FOLLOWING (25 FOR VANTAGE VUE) End-of-15-Minute Period Readings End-of-Hour Period Readings 15-minute Period Totals Hourly Totals • TOTALS Daily Totals Monthly Totals Storm Totals (with start & end date) Yearly Totals • 10-Minute Averages (2 min. for VV) • Hourly Averages or Dominant Daily Averages or Dominant • Monthly Averages or Dominant • • Yearly Averages One-Minute Highs Hourly Highs HIGHS Daily Highs • • • • • • • Monthly Highs • • • • Yearly Highs Hourly Lows LOWS • • • Daily Lows • • • • • Monthly Lows

*Update interval may vary depending on station ID and type of station.

Yearly Low

SPECIAL ALARMS

- 1 Storm Warning: Amount of barometric pressure fall. Storm Clearing: Amount of barometric pressure rise.
- 2 Flash Flood Warning: 15-minute rainfall amount. 24-hour Rain Alarm: 24-hour rainfall amount.
- 3 Rainstorm Alarm: Rainfall amount for current storm.
- 4 High Wind Speed and 10-Minute Average Wind Speed Alarms
- 5 Daily Evapotranspiration Amount Alarm
- 6 Daily UV Dose Alarm





Students of all ages can now participate in the worldwide GLOBE program using protocols developed just for Davis weather stations. See www. globe.gov for details.

GLOBE, The GLOBE Program, and the GLOBE logo are trademarks of the U.S. Government. Use of these trademarks and certification by this company that its products conform to specifications of The GLOBE Program do not imply endorsement of this company or its products by the U.S. Government.

NIST

NIST-Traceable Sensors

In the USA, the National Institute of Standards & Technology (NIST) develops and maintains the standards of measurement to which all others are ultimately traced. Numerous calibrations, tests, and measurement assurance programs are delivered directly to about 10,000 companies. From these companies, NIST-traceable intermediate service providers are the next link in a network that joins together the makers and users of precision instruments. Davis Instruments is proud to participate in this network. Each of our weather stations is carefully manufactured in our California factory. For those users who require NIST-traceability, calibration of new and previously owned sensors is available. For a NIST-calibrated Vantage Pro2 add \$200. For NIST-calibration of individual



sensors, contact us for pricing. Call, fax,

or e-mail us for complete details.

Anemometers are wind-tunnel tested in our California factory.

		Vantage Pro2	ntage Vue	U.S.A. Units			Metric Units	Except for rainfall, all vari- measured in U.S. units of rounded to the nearest me the "Resolution" column.	measure and etric unit shown in
Fun	Function		Van	RESOLUTION	RANGE	ACCURACY ±	RESOLUTION	RANGE	ACCURACY ±
AGRICULTURAL	Evapotranspiration	•		0.01"	0 to 199.99"	5%	0.1 mm	0 to 1999.9 mm	5%
	Growing Degree-Days	0		0.1 Degree-Day	Unlimited		0.1 Degree-Day	Unlimited	
	Cooling/Heating Degree-Days	0	~	0.1 Degree-Day	Unlimited		0.1 Degree-Day	Unlimited	
AGR	Leaf Wetness	•		1	0 to 15	0.5	1	0 to 15	0.5
	Soil Moisture	•		1 cb	0 to 200 cb		1 cb	0 to 200 cb	
BAROMETRIC	Barometric Pressure (Elevation range: -999' to +15,000'; -600 to +4570 m)	~	~	0.01" Hg	16" to 32.5" Hg	0.03" Hg	0.1 mm Hg 0.1 mb	410 to 820 mm Hg 540 to 1100 mb or hPa	0.8 mm Hg 1.0 mb or hPa
BAROI	Three-Hour Trend	~	~	Slow ≥ 0.02" Hg Rapid ≥ 0.06" Hg	5-Position Arrow		Slow ≥ 0.5 mm (0.7 mb) Rapid ≥ 1.5 mm (2 mb)	5-Position Arrow	
	Inside Humidity	~	~	1%	1% to 100%	3%	1%	1% to 100%	3%
HUMIDITY	Outside Humidity	~	~	1%	1% to 100%	3%	1%	1% to 100%	3%
HOM	Inside Dew Point	0	0	0.1°F	-60° to +140°F	3°F	0.1°C	-50° to +60°C	1.5°C
	Outside Dew Point	~	~	1°F	-105° to +130°F	3°F	1°C	-76° to +54°C	1.5°C
 	Rainfall	~	~	0.01"	0 to 199.99"	4%	0.2 mm	0 to 6553 mm	4%
RAINFALL	Rate of Rainfall	V	~	0.01"/hr	0 to 96"/hr 0 to 40"/hr	5% ≤ 5"/hr	0.1 mm/hr	0 to 2438 mm/hr 0 to 1016 mm/hr	5% ≤ 127 mm/hr
>	Solar Radiation	•		1 W/m2	0 to 1800 W/m2	5%	1 W/m2	0 to 1800 W/m2	5%
SOLAR & UV	Solar Energy	0		0.1 Ly	1999.9 Ly	5%	0.1 Ly	1999.9 Ly	5%
	UV Dose	•		0.1 MEDs	0 to 199 MEDs	5%	0.1 MEDs	0 to 199 MEDs	5%
Š	UV Index	•		0.1	0 to 16	5%	0.1	0 to 16	5%
	Inside Temperature	~	~	0.1°F	+32° to +140°F	1°F	0.1°C	0° to +60°C	0.5°C
	Outside Temperature (ISS)	~	~	0.1°F	-40° to +150°F	1°F	0.1°C	-40° to +65°C	0.5°C
l w	Outside Temp (Temp Stn)	•		1°F	-40° to +150°F	1°F	1°C	-40° to +65°C	0.5°C
ATU	Soil or Water Temperature	•		1°F	-40° to +150°F	1°F	1°C	-40° to +65°C	0.5°C
TEMPERATURE	Inside Heat Index	0	0	0.1°F	+30°F to +165°F	3°F	0.1°C	-1°C to +74°C	1.5°C
	Outside Heat Index	~	~	1°F	-40° to +165°F	3°F	1°C	-40° to +74°C	1.5°C
	Temp-Hum-Sun-Wind Index	•		1°F	-90° to +165°F	4°F	1°C	-68° to +74°C	2°C
	Wind Chill	~	~	1°F	-110° to +135°F	2°F	1°C	-79° to +57°C	1°C
2	Time	~	~	1 minute	12/24 hours	8 sec/mo	1 minute	12/24 hours	8 sec/mo
TIME/DATE	Date	~	~	month/day	Leap Year	8 sec/mo	day/month	Leap Year	8 sec/mo
I I	Sunrise & Sunset	~	~	1 minute	12 hours	1 minute	1 minute	24 hours	1 minute
	Wind Direction	~	~	1°	0° to 360°	3°	1°	0° to 360°	3°
WIND	Compass Rose	~	~	22.5°	16 compass points		22.5°	16 compass points	
	Wind Speed	~	~	1 mph 1 knot	2 to 180 mph 2 to 156 knots	5%	0.1 m/s 1 km/hr	1 to 80 m/s 3 to 290 km/hr	5%
	Direction of High Speed	~	~	22.5°	16 compass points		22.5°	16 compass points	
	Wind Run	0	0	0.01 mph 0.01 knot	Unlimited	5%	0.01 m/s 0.01 km/hr	Unlimited	5%

"Resolution" refers to the number of digits or decimal places displayed on the console. For metric units, this is not the actual unit of measure except for rainfall. Our rain collector measures in true 0.01" or 0.2 mm increments. All other weather variables are measured and accumulated in U.S. units of measure, which are then converted to metric units for display purposes.

For complete specifications, visit our web site at www.davisnet.com, then click on Support » Weather Support » Specification Sheets.

[✓] Included
 Optional sensor required, shown on console
 Optional, requires WeatherLink.
Growing degree-days also requires Ag/Turf Management Module. Solar Energy requires Solar Radiation sensor.

Things to consider when purchasing a 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 temperatures and rain rate. Only Vantage Pro2 or Vantage Vue give you those features, plus:

- · Additional Rainfall Information: 15-minute, hourly, monthly, and yearly rainfall, and rainfall amounts for each of the last 24 storms.
- Additional Wind Speed Information: 10-minute average wind speed and dominant wind direction. In addition, with Vantage Vue, you get 2-minute average speed, high speed and direction in the last ten minutes.
- Apparent Temperature: Heat index, and with Vantage Pro2's optional solar radiation sensor, the temperature-humidity-sun-wind index.
- · Vantage Pro2 optional Solar and UV Radiation Sensors: Greater awareness of the dangers of excessive exposure to the sun.
- · For agricultural users: Evapotranspiration, leaf wetness, soil moisture, and soil temperature with Vantage Pro2 optional sensors.

2. HOW EASY IS IT TO SET UP?

With most competing stations, you need to install each sensor separately, which adds complication and takes time and effort. Vantage Pro2 and Vantage Vue are factory-assembled to make setup as easy as possible. Just complete a few minor assembly steps, insert the battery, and you're ready to mount the sensor suite. Mounting is further simplified by using our optional tripod. On Vantage Pro2, gain further accuracy by detaching the anemometer from the sensor suite and mounting it separately.

3. WHAT IS THE MAXIMUM TRANSMISSION DISTANCE?

The wireless transmission range for most competing stations is generally quite limited. Although range is highly variable (depending not only on the physical features of the land and structure but also on RF interference in the area), Vantage Pro2 and Vantage Vue will almost always outperform the competition. And we offer wireless repeaters and Vantage Connect should you wish to extend the range even further.

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 Pro2 and Vantage Vue give you the highs and lows (and/or totals or averages) for just about all weather conditions, with time and/or date for the last 24 days, months, or years for Vantage Pro2, and current and last 25 days, months, or years for Vantage Vue. No other stations on the market even come close. And

not only can you view the data numerically, you can also view on-screen graphs, for instant visual representations of long-term trends.

5. HOW OFTEN IS THE INFORMATION UPDATED?

The Vantage Pro2 and Vantage Vue transmitters send data to the console every $2\frac{1}{2}$ seconds. Highly variable conditions (such as wind speed and direction) are updated with each packet, while less variable conditions are updated every 10 seconds. With most competing stations, the update interval is much longer: 30 seconds, or even up to 3 minutes. This may not seem important, but try watching the wind gust, or the rain suddenly come pouring down. It's very disconcerting to look out the window, see something happen weather-wise, and not see it reflected on the console right away.

6. HOW IS THE FORECAST GENERATED?

The competition generally bases their forecast on barometric pressure alone, which results in none too accurate a prediction. Vantage Pro2 and Vantage Vue use 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?

Competing stations use icons to show the forecast. Vantage Pro2 and Vantage Vue have similar icons, plus Vantage Pro2 has over 80 different forecast messages that scroll across the bottom of the display. None of the other stations have this. The Vantage Pro2's ticker tape also gives additional information depending on which key you press. Both Vantage Pro2 and Vantage Vue are able to display 10-minute average wind speed, the last 15 minutes and last 24 hours of rain. These are only a few examples of Davis stations' unique features. Competing stations don't have anything like this.

8. HOW MUCH DATA CAN YOU GRAPH ON THE SCREEN?

With Vantage Pro2 and Vantage Vue, 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 Pro2, and with the Weather Center feature on Vantage Vue, you can do tons of analysis, even without purchasing a software package. 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? How much rain did we get this month as compared to last month?

9 CAN YOU LISE THE STATION AT HIGHER ELEVATIONS?

Our stations can be used up to 15,000 feet (4570 m) in elevation. Many competing stations are limited

to 6,000 feet (1829 m) 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 Pro2 and Vantage Vue weather stations work just fine, no matter what the elevation.

10. IS THERE A COMPUTER INTERFACE?

If you'd like to do even more analysis, 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. Transfer the data whenever you like, or leave your computer on to have it transfer automatically every day. For some competing stations, no software package is available. Other stations do offer software, but don't include a data logger—so your PC must be on and the software running at all times.

11. HOW MANY ALARMS ARE THERE?

With Vantage Pro2 and Vantage Vue, alarms can be set for just about every weather variable, for just about any reason imaginable—up to 70 alarms for Vantage Pro2 and 22 for Vantage Vue. The alarms found on competing stations are generally quite limited.

12. WHAT IS THE ACCURACY, RESOLUTION, AND RANGE?

Vantage Pro2 and Vantage Vue generally beat their similarly-priced competition 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 proud to publish our specs in our catalog and on our web site, and stand behind them 100%.

13. HOW MANY PEOPLE ARE USING THE STATIONS?

There are many, many thousands of happy Davis weather station users around the country and around the world. Check out "Weather World 'Round" in the weather section of www.davisnet.com under "Cool Stuff" and click on links to visit web sites of Davis weather station owners around the world. You'll find that many other Davis weather station owners. participate as volunteer observers for the National Weather Service, the National Hurricane Center, and numerous local TV and radio stations. You can also visit www.weatherlink.com and see a worldwide map of Davis weather station owners who use our WeatherLinkIP software, which along with other features, creates its own weather web site for your

14. HOW LONG HAS THE COMPANY BEEN IN BUSINESS?

Established in 1963, Davis Instruments opened up the home weather station market back in 1989. Our weather stations are assembled and tested right here in Hayward, California, where we have a full staff giving the best customer service and aftermarket support in the business. In addition, Davis Instruments Quality Management System is ISO 9001 certified.



CarChip Connect's cellular communication allows you to view your car's location in real time on the web.

New CarChip® Connect lets parents of teen drivers, employers—or anyone who owns a car—know when, where, and how their car is being driven, in real time.

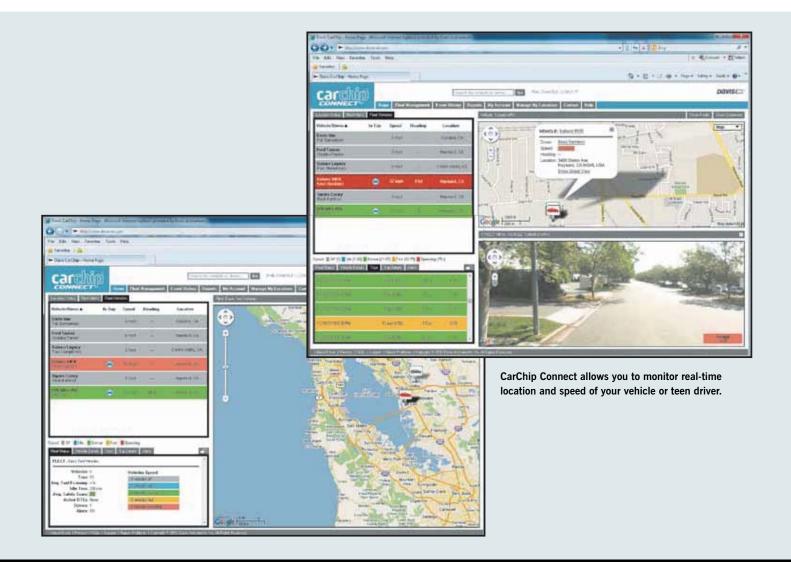
Simply plug the very small, but very powerful, GPS-enabled unit into the vehicle's OBD II (on-board diagnostics) port and log on to a secure, private, user-friendly web site. You'll see your vehicle's location, its speed, driving routes, even engine diagnostic and performance data. You can also set custom alerts to notify you of any problems relating to driver speed, odd driving hours, going out of a pre-defined area, engine diagnostics and more.

With CarChip Connect, your car may be out of your sight, but it's never out of your range. Whether it is carrying the precious cargo of your inexperienced teen driver, or your business reputation, you can rest assured that your car or driver are where they should be, doing what they should be doing.

- Lets you view the real-time location of your vehicle. Receive updates as often as every minute.
- Provides information on an easy-to-use web site from anywhere you have internet access.
- Plugs in easily to the OBD II port. No need for professional installation.







Call 1 300 737 871



Think your teen is a safe driver? Don't wait to find out.

Don't wait for a speeding ticket—or worse—to find out how your teen is driving. CarChip® Pro plugs instantly into the OBD II (on-board diagnostics) port in your car or truck, where it continuously logs vehicle and driver performance. Download the data to your PC, and you'll get complete details for each trip plus details on engine performance when and if the vehicle's check engine light comes on. Stores up to 300 hours of driving data. Download the data at any time and clear the memory to start again, or let CarChip Pro automatically

overwrite the oldest data.

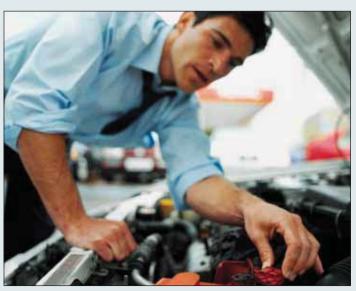


CarChip Pro plugs instantly and unobtrusively into the OBD II port in your car or truck.

Installation couldn't be easier.

- 1. Locate your car's OBD II port. You'll find it inside the car, under the driver's side steering column and dashboard.
- 2. Plug the data logger in. The blinking light tells you it's installed and ready to go.
- 3. Start driving. CarChip Pro will start collecting data your very next trip. Later, download to your PC for analysis, graphing, and charting.

CarChip Pro is also available in a fleet model with additional reporting capabilities specially designed for fleet managers. For more information, ask for our Fleet Management Tools catalog.



Wish you could read your car's mind?

By detecting malfunctions early and taking the guesswork out of diagnosing problems, CarChip Pro can help you keep your car in peak running condition. Log any 4 out of 23 possible engine parameters, each of which can affect operation, emissions, and fuel economy. CarChip Pro also has user-settable and audible alarms for speed, hard braking, and quick acceleration.

CarChip Pro PATENTED

Software lets you:

- · Review and clear diagnostic trouble codes.
- · View summary and detail reports for each trip.
- · Sort business and personal trips.
- · Set thresholds for excessive speed, acceleration, and braking.
- · View emissions readiness status before your next smog check.
- · Enter gasoline purchases and calculate mileage.
- · Copy data to spreadsheets and text documents for further analysis.

System requirements:

· Windows XP and above and a USB port.

CarChip Pro can be used with most cars and trucks sold in the USA and Canada, model-years 1996 or later. For a list of excluded vehicles, visit www.carchip.com. Vehicles sold outside the USA and Canada may or may not be compatible.



CarChip Pro Records 300 hours of trip details depending on the logging interval and number of parameters selected:

- · Time and date for each trip.
- · Distance traveled.
- Speed (can be logged as often as every second).
- · Hard accelerations and decelerations.
- Engine diagnostic trouble codes plus the status of engine parameters at the time the codes occurred.
- . Time and date every time CarChip is connected or disconnected.
- Up to 4 out of 23 possible engine parameters, recorded every 5 to 60 seconds. Choose from:

RPM Throttle position Engine load Fuel pressure Fuel system status Short-term fuel trim Long-term fuel trim

Battery voltage Timing advance Coolant temperature Air flow rate Intake air temperature Intake manifold pressure 0, sensor output voltage Davis manufactures a complete line of vehicle monitoring systems. CarChip Pro is the all-in-one driving and engine performance monitor. For larger commercial vehicle fleets, Davis makes a fleet version of CarChip, CarChip Fleet Pro, which works with our Fleet Management Software to rank drivers and vehicle performance. Wireless and GPS accessories are also available. For truck and heavy equipment needs, our DriveRight products are the ideal choice. Call for more info or see our web site: www.carchip.com.

See sample computer screens below:

inal

Vehicle: Ford Escape

Evaporative System

Oxygen Sensor

EGR System Misfire Monitoring

Secondary Air System

Oxygen Sensor Heater

Fuel System Monitoring

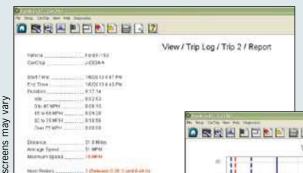
Comprehensive Monitoring

Monitor

Catalyst

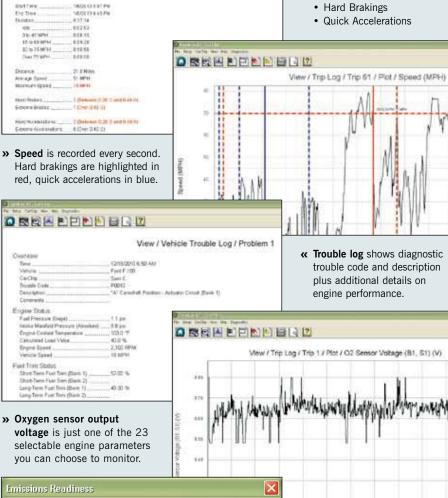
Status as of: 03/31/10 10:52 AM

Supported



« Trip log includes: · Time & Date

- Distance
- Average Speed
- Maximum Speed



Status

Complete

Complete

Complete

Complete

Complete

Complete

Complete

Complete

Complete

« Emissions readiness lets you find out if your car will pass the next smog test.

Limited Warranty

We warrant our products to be free of defects in material and workmanship for one year from date of original purchase. While we make every effort to carefully manufacture our products to the highest standards of quality, occasionally parts may be found to be missing, defective, or damaged. If you have a defective part, return the product to us, shipping charges prepaid. Include proof of purchase and a written explanation of the trouble. During the warranty period, we will, at our option, either repair or replace the product free of charge. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized service, or to incidental or consequential damages beyond the Davis products themselves. Implied warranties are limited in duration to the life of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental and consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may have other rights, which vary from state to state or country to country.

Details, specifications, and prices are subject to change at any time without notice.

30-Day Money-Back Guarantee

If for any reason you are unsatisfied with anything purchased from us, return it within 30 days and we will gladly refund your purchase price. Shipping charges are not refundable. This guarantee does not apply to opened software packages.

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Davis Instruments Quality Management System is ISO 9001 certified.

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The Way to Watch Weather Tough • Accurate • Affordable

VANTAGE VUE AND VANTAGE PRO2 WEATHER STATIONS

- 1,000 ft. (300 m) wireless range (3X farther than competing stations)
- 2.5 second update
 (up to 10X faster than the competition)
- Post your weather to the Internet without a PC
 Join the weatherlink.com community
- Transmit and receive data via cellular connection with Vantage Connect



