

Weather Stations

Vantage Vue



Vantage Pro2



Measure Weather Where it Matters

Davis stations have been weathering storms and delivering accurate environmental data for over 30 years. Meteorologists, farmers, research scientists, backyard gardeners, and weather enthusiasts worldwide rely on our durable, precision instrumentation.

Vantage Vue®: Get serious about weather

Vantage Vue provides accurate, reliable weather monitoring in a self-contained, easy-to-install system. Sleek but tough, Vantage Vue gives you all the weather data you need:

- Inside & Outside Temperature
- Inside & Outside Humidity
- Barometric Pressure
- Wind Speed & Direction
- Dew Point
- Rainfall

Your outdoor Sensor Suite sets up in minutes and transmits data wirelessly to your console anywhere in your home, school, or business. In addition to displaying current weather conditions and trends, Vantage Vue also boasts the innovative Weather Center button that displays weather variables over the last 25 days.

Features:

- Up to 10x faster updates than the competition. (Every 2.5 seconds.)
- Wireless transmission 3x farther than the competition. (1,000 ft./300 m from station to console.)
- Easy-to-read backlit screen.
- Glow-in-the-dark keypad.

1. TIME & DATE

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

2. MOON PHASE

Track 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, and months.

9. "CHANGE IN WEATHER SINCE YESTERDAY" FEATURE

Allows comparisons 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.

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 you to the "current" screen from anywhere in the program.

12. GRAPHS

Graphs the last 25 hours, days, or months. View up to 50 graphs for 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 wind speed updates every 2.5 seconds. Displays wind speed in miles per hour, meters per second, kilometers per hour, or knots. Provides the average and high wind speed for 2-minute and 10-minute intervals.



Rugged, accurate, affordable

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 small profile Sensor Suite is designed to minimize visual impact in your yard or on your roof.

6250 Vantage Vue \$395
PATENTED



Pair with a data collection product (pages 14-17) to access data anywhere, anytime, and on any device with the WeatherLink Cloud.

1. WIRELESS

Frequency-hopping, spread-spectrum radio ensures consistent transmission up to 1,000 ft. (300 m) line-of-sight from 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

Wind tunnel-tested to 200 mph (320 km/h).

4. WEATHER-PROOF HOUSING

Corrosion-resistant cover provides durability in extreme conditions. Electronics are potted or overmolded 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) and 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. Onboard supercapacitor 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



« The Sensor Suite mounts on poles from 1.00" to 1.75" (2,54 cm to 4,45 cm) in diameter (pole not included).

Vantage Pro2™: Professional and rugged

Vantage Pro2 and Vantage Pro2 Plus offer the professional weather observer or serious weather enthusiast robust performance with a wide range of options and sensors. You'll get your own local forecast, highs/low, totals or averages, and graphs for virtually all weather variables over the past 24 days, months, or years—all on the console. Vantage Pro2 uses frequency-hopping, spread-spectrum radio to transmit and receive data up to 1,000 ft. (300 m) line-of-sight. Vantage Pro2 is also an excellent choice for emergency professionals, farmers, educators, researchers, municipalities, and others, to monitor wind and moisture conditions, irrigation requirements, and potential flooding.

Features:

- Up to 10x faster updates than the competition. (Every 2.5 seconds.)
- Wireless transmission 3x farther than the competition. (1,000 ft./300 m from station to console.)
- UV/solar radiation and evapotranspiration updates. (Included with Vantage Pro2 Plus, optional for Vantage Pro2.)
- Large, backlit 3.5" × 6" (9 × 15 cm) LCD screen.

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 the bottom of the 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/low, 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

Included 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

Included 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 the graph or view highs and lows over time. "Plus" and "minus" keys simplify data toggling.

15. TICKER-TAPE DISPLAY

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

16. GRAPHS

Graphs 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.

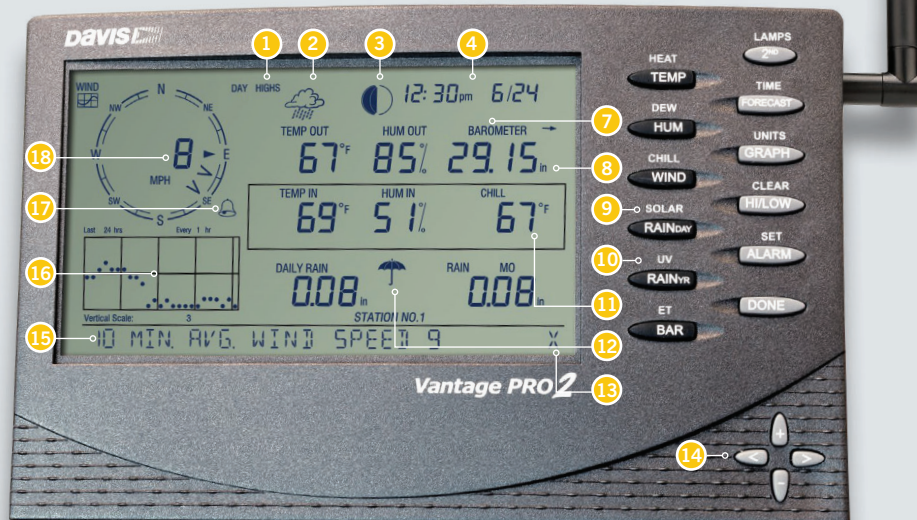
Vertical scale changes depending on what you are graphing.

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 the compass rose, view wind direction to 1° resolution, or view wind speed.



The ultimate in versatility and options

All Vantage Pro2 stations include a console and a versatile Sensor Suite (pictured below) that combines our rain collector, temperature and humidity sensors, and anemometer into one package. You can customize your Vantage Pro2 by adding extra consoles or the Sensor Transmitter options shown on page 31. Vantage Pro2 weather stations are available in both wireless and cabled versions. Vantage Pro2 Plus includes UV and Solar Radiation sensors; however, all stations can be customized with either.

Vantage Pro2 stations: From \$625

(See pages 10-11 for models and prices.) PATENTED

NIST



Pair with a data collection product (pages 14-17) to access data anywhere, anytime, and on any device with the WeatherLink Cloud.

1. 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 200 mph (320 km/h).

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

Optional Sensor Transmitter allows you to mount the anemometer even further from the rain collector and the rest of the Sensor Suite.

2. RAIN COLLECTOR

The AeroCone 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. Includes improved debris screen and spikes to keep birds from landing.

3. PASSIVE RADIATION SHIELD

The most effective passive shelter available. Protects your Temperature/Humidity Sensor from solar radiation and other sources of radiated and reflected heat. Multi-

plate construction for maximum airflow.

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 to power the motor-driven 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 supercapacitor for night operation. Lithium battery provides backup on cloudy days. (Solar panel is not included with cabled version.)

7. WEATHER-RESISTANT SHELTER

Provides protection against the elements for the Sensor Suite's electronic components.

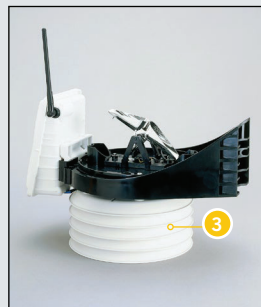
8. SOLAR RADIATION AND UV SENSORS (VANTAGE PRO2 PLUS)

Includes sensors to track solar radiation, evapotranspiration and UV indices. Time

measures are programmable to meet your specific needs. Sensors can be added separately to the Vantage Pro2.

9. OPTIONAL MOUNTING POLE

One of several installation options. For more, including our mounting tripod, see page 12.



6152 Wireless Vantage Pro2. Includes built-in bubble level for accurate installation. The aluminum-plated tipping bucket in our rain collector is self-emptying, corrosion-resistant, and laser-calibrated for exceptional accuracy.

See page 41-42 for installation diagrams.

Pictured: 6163 Wireless Vantage Pro2 Plus with 24-Hour Fan-Aspirated Radiation Shield



Weather Stations

Choose the configuration that's right for you. The Davis Vantage line is offered as a full weather station (Sensor Suite and console) or a stand-alone Sensor Suite (without console).



Vantage Vue

Vantage Pro2
Shown here: 6152

Vantage Pro2 Plus
Shown here: 6163

Davis accuracy in a self-contained, easy-to-install system. Includes solar-powered transmitter.

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

Choose a cabled station for the most economical installation where lightning risk is minimal. Choose wireless for easiest installation, additional sensor options and reduced risk of lightning damage.

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.

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
	\$395	\$625	\$685	\$905	\$1100	\$1160	\$1380
CONSOLE							
Should be run using the included AC-power adaptor. 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 adaptor.	•		•	•		•	•
12-hour advance forecast icons	•	•	•	•	•	•	•
24-48 hour advance forecast ticker-tape		•	•	•	•	•	•
Weather center with scroll-through data screens	•						
SENSOR SUITE							
Anemometer, rain collector, temperature, and humidity sensors	•	•	•	•	•	•	•
Detachable anemometer with 40' (12 m) cable		•	•	•	•	•	•
Solar Radiation Sensor		Optional	Optional	Optional	•	•	•
UV Sensor		Optional	Optional	Optional	•	•	•
DATA TRANSFER							
100' (30 m) cable		•			•		
Solar-powered wireless 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
Sensor Transmitter			Optional	Optional		Optional	Optional

Sensor Suites

Don't need a console? Your data can be pushed directly to the WeatherLink Cloud with a data collection device (pages 14-17) and a Sensor Suite that includes just the outdoor sensors. Sensor Suites are a great choice for those who want to access their data only on their smartphone, tablet, or computer; or who want to integrate the Sensor Suite into an EnviroMonitor system. Choose from wireless or cabled, in a variety of options. (No console included.)

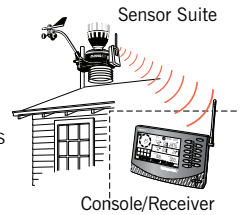


Vantage Vue	Vantage Pro2 Shown here: 6322			GroWeather Shown here: 6820		Vantage Pro2 Plus Shown here: 6328		
6357 Wireless	6322C Cabled	6322 Wireless	6323 Wireless w/Fan	6820C Cabled	6820 Wireless	6327C Cabled	6327 Wireless	6328 Wireless w/Fan
	EM			EM		EM		
\$240	\$390	\$450	\$670	\$595	\$655	\$865	\$925	\$1145
SENSOR SUITE								
•	•	•	•	•	•	•	•	•
	•	•	•	•	•	•	•	•
	Optional	Optional	Optional	•	•	•	•	•
	Optional	Optional	Optional	Optional	Optional	•	•	•
DATA TRANSFER								
•	•			•		•		
		•	•		•		•	•
RADIATION SHIELD								
•	•	•		•	•	•	•	
	Optional	Optional		Optional	Optional	Optional	Optional	
			•					•

Three ways to upgrade your Vantage Pro2

1. Choose a wireless model

- Listen to up to eight channels of data.
- Use multiple consoles with one station.
- Move the console wherever you want.

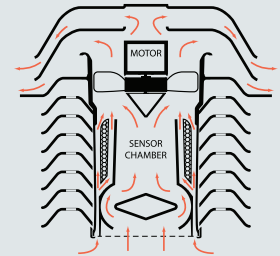


2. Choose a Plus model

- Solar and UV sensors come pre-installed.
- Console calculates ET
- Save \$130 over buying separately.



Shown here:
Solar and UV sensors,
and mounting shelf.



3. Choose a model with 24-Hour Fan-Aspirated Radiation Shield

Models 6153, 6163, 6323, and 6328 include our patented 24-Hour Fan-Aspirated Radiation Shield for maximum accuracy of temperature and humidity readings. A motor-driven fan draws a constant airflow through the sensor chamber at 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 slows to 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 sunlight 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.

Installing your weather station

Davis weather stations give you accurate data wherever they are installed. Whether you want to know the temperature on your back deck, are concerned about the wind speed in your garden, or want to report your data to NOAA, Davis weather stations can be installed to perfectly suit your needs.



Vantage Pro2 on Mounting Tripod

Mounting Tripod

This galvanized steel tripod with tilting brackets makes for an easy installation anywhere, even on a roof or uneven surface. Perfect for mounting any Sensor Suite, Vantage Connect or EnviroMonitor Gateway/Node. Poles measure 36.38" (0,92 m) long. Assemble the two together to make a single 69.75" (1,77 m) pole. Outside diameter is 1.31" (33 mm). For ground installation use 7716A, which includes three 18" (0,46 m) lag bolts.

7716 Mounting Tripod \$110



7716A Mounting Tripod

with 18" (0,46 m) lag bolts \$130



Mounting Pole Kit

Ideal for mounting a Vantage Sensor Suite, Vantage Connect, or EnviroMonitor Gateway/Node to a preexisting structure such as a deck, fence post, or roof eaves. Includes two galvanized steel poles, connector and mounting hardware. Poles measure 19.5" (0,50 m) and 21" (0,53 m) long. Assemble the two together to make a single 37.5" (0,95 m) pole. Outside diameter is 1.31" (33 mm). Includes mounting hardware.

7717 Mounting Pole Kit \$35



Vantage Vue on Mounting Pole

Installation Guidelines

Mount your Vantage Vue or Vantage Pro2 Sensor Suite:

- 5-7 feet (1,5-2,1 m) above the surface (ground or roof).
- Over a flat area that is gently sloping, regularly mowed, or naturally landscaped, with good drainage.
- Away from heat radiators, such as asphalt or air conditioning units.
- Where you can access the rain collector for maintenance.
- At least 2 feet (0,6 m) above the average maximum yearly snow depth.
- So that the anemometer is not blocked by surrounding obstructions such as trees or buildings.
- The Vantage Pro2 anemometer can be extended from the station with the 40 ft. (12 m) included cable, or by combining with a Sensor Transmitter. (See page 31 for options.)