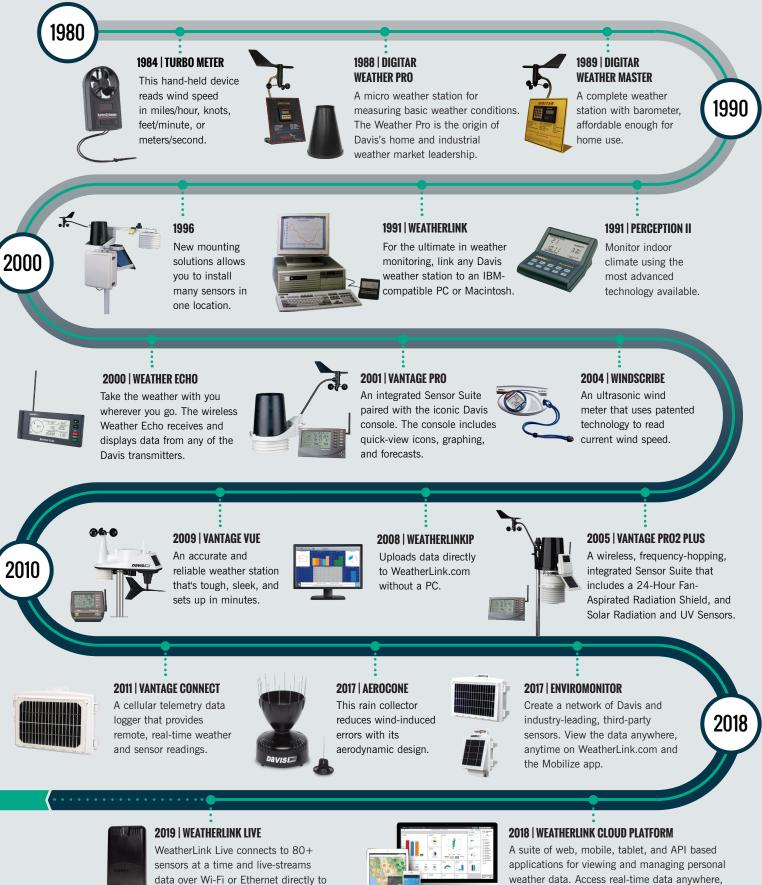




# **Over 35 Years of Weather Innovation**



anytime and on any device.

the WeatherLink Cloud.

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NIST

GLOBE protocol. See page 37 for details. Identifies the stations or sensors that can be

NIST traceable. See page 37 for details.

Identifies stations suitable for use with



ISO 9001 CERTIFIED COMPANY

# What's New?



# **New** WeatherLink Live<sup>™</sup>

# Go Wi-Fi with your weather

Now you can stream your sensor data live, effortlessly, to any smart device in your Local Area Network (LAN). WeatherLink Live receives your data from your outside Sensor Suites and add-on sensors and transmits it via Wi-Fi to the WeatherLink Cloud. Setup couldn't be simpler. (And you can keep your tool box in the garage!) Just download the app, follow the steps, and you'll be viewing your data on your phone app or desktop in minutes. Available Q1 2019. Check it out on page 15.





# **New WeatherLink Cloud**An all new experience

The new WeatherLink Cloud is here. Accessing, analyzing, and sharing real-time sensor data has never been easier. The new WeatherLink website, mobile apps, and APIs have gone through more than routine updates—we've made fundamental improvements. From design and ease of use to new features, we've elevated every aspect of the WeatherLink experience. Check it out on page 19.

# **New** Integrated Pest Management Report

# New feature in Mobilize app

Davis has researched and developed the most comprehensive disease and pest models available. Available Q1 2019: Integrated Pest Management (IPM) report available in the Davis Mobilize app. This tool will help farmers protect their crops from pest damage with the most accurate, cropspecific risk assessment possible. Check it out on page 27.

# 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.

P5

# Vantage Vue<sup>®</sup>: 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, and lows, temperature changes by the hour, and barometric value changes. Also displays astronomical data.

such as daily highs

### 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

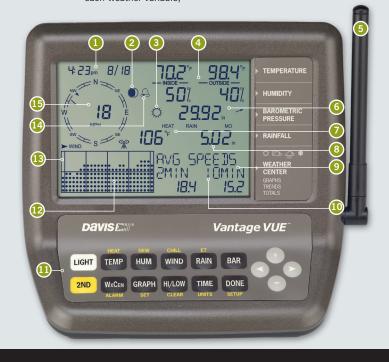
YESTERDAY" FEATURE Data point on the graph indicates the weather during the same time yesterday to help compare and analyze day-to-day weather trends.

### 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





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, spreadspectrum radio ensures consistent transmission up to 1,000 ft. (300 m) lineof-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).

8

### 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.

2

Davis

### 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.

6

4

5



6250 Vantage Vue

✓ The Sensor Suite mounts on poles from 1.00<sup>e</sup> to 1.75<sup>e</sup> (2,54 cm to 4,45 cm) in diameter (pole not included).

# Vantage Pro2<sup>™</sup>: **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/lows, 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"  $\times$  6" (9  $\times$  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. 12hour 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/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

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.

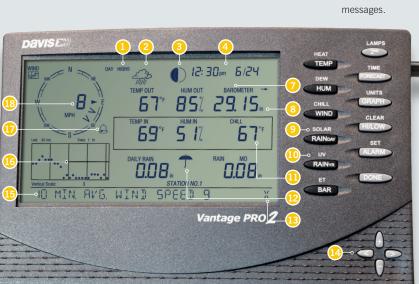
Vertical scale changes depending on what you are graphing.

### 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 (See pages 10-11 for models) PATENTED





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 tunneltested 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. Multiplate 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.

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

# ١

| The Davis line of Varitage weather stations built to provide a luit vaster system. To maximize your weather stations, a varieby of additional sensors and stations are available to make your weather station even more comprehensive.       61622       6152       6152       6162       Wireless Wirel  | Weather Stations<br>Choose the configuration that's<br>right for you. The Davis Vantage<br>line is offered as a full weather<br>station (Sensor Suite and console)<br>or a stand-alone Sensor Suite<br>(without console). | Vantage Vue<br>Davis accuracy in a<br>self-contained, easy-<br>to-install system.<br>Includes solar-<br>powered transmitter. | Create a custor<br>station with a v<br>and sensors. So<br>and detachable<br>Choose a cable<br>economical ins<br>risk is minimal.<br>installation, add | age Pro2<br>here: 6152<br>nized professional<br>vide range of optic<br>olar-powered trans<br>a anemometer.<br>d station for the r<br>tallation where lig<br>. Choose wireless<br>ditional sensor op<br>sk of lightning dar | ons<br>smitter<br>nost<br>shtning<br>for easiest<br>tions | Shown here:<br>Includes UV &<br>24-Hour Fan A<br>maximum accu | Vantage Pro2 Plus         Shown here: 6163         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. |          |   |  |  |  |
|---|---|--|---|--|---|---|--|----------|---|--|--|--|
| Should be run using the included AC-power adaptor. Add three C batteries (not included) for backup during power outges. <ul> <li>Image: Status included AC-power adaptor.</li> <li>Image: Status included AC-power adaptor.</li></ul>   | is built to provide a full weather system. To<br>maximize your weather watching, a variety of<br>additional sensors and stations are available<br>to make your weather station even more                                  |  |   |  | Wireless  |   |  | Wireless |   |  |  |  |
| May be run full-time using three C batteries<br>(not included AC-power adaptor.       •<  | Should be run using the included AC-power adaptor. Add three C batteries (not included)   |  | •   |  |   | •   |  |          |   |  |  |  |
| 24-48 hour advance forecast ticker-tape       • <td>May be run full-time using three C batteries (not included). May also be run using the</td> <td>•</td> <td></td> <td>•</td> <td>•</td> <td></td> <td>•</td> <td>•</td> <td></td>  | May be run full-time using three C batteries (not included). May also be run using the  | •  |   | •  | •   |   | •  | •        |   |  |  |  |
| Weather center with scroll-through data screens       •       ·       <   | 12-hour advance forecast icons  | •  | •   | •  | •   | •   | •  | •        | 1 |  |  |  |
| data screens </td <td>24-48 hour advance forecast ticker-tape</td> <td></td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>1</td>   | 24-48 hour advance forecast ticker-tape   |  | •   | •  | •   | •   | •  | •        | 1 |  |  |  |
| Anemometer, rain collector, temperature, and<br>humidity sensors       •  |   | •  |   |  |   |   |  |          |   |  |  |  |
| humidity sensorsImage: sensorsImage: sensorsImage: sensorsDetachable anemometer with 40'<br>(12 m) cableOptionalOptionalOptionalOptionalImage: sensorsImage: se   |   |  |   |  |   |   |  |          |   |  |  |  |
| (12 m) cable••• <th< td=""><td>humidity sensors</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td></td></th<>   | humidity sensors  | •  | •   | •  | •   | •   | •  | •        |   |  |  |  |
| UV SensorImage: constraint of the sensorImage: constraint of the sensorDATA TRANSFERImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensor100' (30 m) cableImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensor100' (30 m) cableImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensorImage: constraint of the sensorSolar-powered wireless transmitter with<br>battery backupImage: constraint of the sensorImage: constraint of the sensor <td>(12 m) cable</td> <td></td> <td></td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td></td>  | (12 m) cable  |  |   | •  | •   | •   | •  | •        |   |  |  |  |
| DATA TRANSFERImage: constraint of the second se |   |  | Optional  | Optional   | Optional  | •   | •  | •        |   |  |  |  |
| 100' (30 m) cableImage: constraint of the state of the sta |   |  |   |  |   |   |  |          |   |  |  |  |
| Solar-powered wireless transmitter with<br>battery backup••• </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>   |   |  |   |  |   |   |  |          |   |  |  |  |
| RADIATION SHIELDImage: constraint of the state of the stat | Solar-powered wireless transmitter with   | •  | •   | •  | •   | •   | •  | •        |   |  |  |  |
| Standard Radiation Shield••••••••Daytime Fan-Aspirated Radiation ShieldOptionalOptionalOptionalOptionalOptionalOptionalOptionalII24-Hour Fan-Aspirated Radiation ShieldImage: Comparison of the state of the st  |   |  |   |  |   |   |  |          |   |  |  |  |
| Daytime Fan-Aspirated Radiation ShieldOptional <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  |   |  |   |  |   |   |  |          |   |  |  |  |
| 24-Hour Fan-Aspirated Radiation Shield       •  |   | •  |   |  |   | -   | -  |          |   |  |  |  |
| ADD-ONSImage: Constraint of the second s |   |  | Optional  | Optional   |   | Optional  | Optional   |          |   |  |  |  |
| Additional consoles to view data in more than<br>one location       Optional       Optional       Optional       Optional       Optional       Optional         Special-purpose Wireless Leaf & Soil Moisture/<br>Temperature Station       Continuation       Optional       Optional       Optional       Optional       Optional   |   |  |   |  | •   |   |  | •        |   |  |  |  |
| One location     Optional     Optional       Special-purpose Wireless Leaf & Soil Moisture/<br>Temperature Station     Optional     Optional     Optional   | Additional consoles to view data in more than   | Optional   |   | Optional   | Optional  |   | Optional   | Optional |   |  |  |  |
| iemperature Station   | Special-purpose Wireless Leaf & Soil Moisture/  |  |   |  |   |   |  |          |   |  |  |  |
| Sensor Transmitter Optional Optional Optional Optional Optional   | Sensor Transmitter  |  |   |  | 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.)



| 110              |                     | 191                        |          |                    | 10                         |                                       |          |          |  |  |  |  |
|------------------|---------------------|----------------------------|----------|--------------------|----------------------------|---------------------------------------|----------|----------|--|--|--|--|
| Vantage Vue      | Vantage<br>Shown he | e <b>Pro2</b><br>ere: 6322 |          | GroWea<br>Shown he | a <b>ther</b><br>ere: 6820 | Vantage Pro2 Plus<br>Shown here: 6328 |          |          |  |  |  |  |
| 6357             | 6322C               | 6322                       | 6323     | 6820C              | 6820                       | 6327C                                 | 6327     | 6328     |  |  |  |  |
| Wireless         | Cabled              | Wireless                   | Wireless | Cabled             | Wireless                   | Cabled                                |          | Wireless |  |  |  |  |
|                  |                     |                            | w/Fan    |                    |                            |                                       |          | w/Fan    |  |  |  |  |
|                  | en                  |                            |          | en                 |                            | -                                     |          |          |  |  |  |  |
|                  | EM                  |                            |          | EM                 |                            | EM                                    |          |          |  |  |  |  |
|                  |                     |                            |          |                    |                            |                                       |          |          |  |  |  |  |
| SENSOR SUITE     |                     |                            |          |                    |                            |                                       |          |          |  |  |  |  |
| •                | •                   | •                          | •        | •                  | •                          | ٠                                     | •        | •        |  |  |  |  |
|                  | •                   | •                          | •        | •                  | •                          | •                                     | •        | •        |  |  |  |  |
|                  | 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 money over

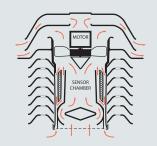
buying separately.



Console/Receiver

Sensor Suite

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 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.





# Installation Guidelines

Mount your Vantage Vue or Vantage Pro2 Sensor Suite:

IEM

- 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.

# **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" (0,5 m) lag bolts.

ΕM

EM

7716 Mounting Tripod 7716A Mounting Tripod with 18" (0,46 m) lag bolts



Vantage Vue on Mounting Pole

- 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.)

Join the Davis Community: Hundreds of thousands of stations around the world with common goals: accuracy, durability, and dependability

# Why Davis Instruments:

When you purchase a Davis Instruments weather station, you join a community of weather enthusiasts and professionals around the world that are committed to collecting, analyzing, and sharing accurate weather data. Our products are meant to withstand the harshest environments and many of our customers have enjoyed their stations for over a decade with minimal routine maintenance.

# Made by "US"

Our products are designed, assembled, and rigorously tested by the Davis team at our headquarters in Hayward, California.

# Durability

Our weather stations go through a minimum of 10 tests before shipping. They have been engineered to withstand corrosion, 200 mph (90 m/s) winds, the scorching sun, and extreme temperatures.

# **Precision & Accuracy**

Our products provide scientific-grade precision and accuracy. We have spent decades improving and refining every sensor that we make.

# Value

Our products are designed to provide professional-grade instruments at an affordable price. You can find a cheaper station, but you won't be disappointed by a Davis station.



# WeatherLink Network: The Davis online community

Join the WeatherLink Network by connecting your weather station to the WeatherLink Cloud to access your data anywhere, anytime on WeatherLink.com and the WeatherLink mobile apps.

See pages 19-21 for more information.

# Your Data, Your Way

Davis offers a wide array of data collection options to keep the data coming. No matter if it's from your backyard, the

back forty or the back woods, we've got you covered.



**Data Collection** 





**EnviroMonitor Gateway** Cellular+Mesh Network

WeatherLink USB/Serial Computer

**P14** 

# **New** WeatherLink Live: A smart way to stream live data

WeatherLink Live makes getting your data from any Davis sensor simple, reliable, and fast. This data hub uses Davis's dependable, frequency-hopping, spreadspectrum radio to collect data from a network of indoor and outdoor sensors. Access your data from the WeatherLink Cloud on the website and mobile apps.

# Monitor YOUR environment

Configure a custom network of multiple Davis sensors with one WeatherLink Live.

Add any combination of up to eight of the following:

- Vantage Vue Sensor Suites
- Vantage Pro2 Sensor Suites
- Sensor Transmitters with up to five sensors (pages 31-35)
- Wireless Leaf & Soil Moisture/Temperature Stations (page 31)

# Welcome to the smart home

- Ask Amazon's Alexa about your weather.
- Connect your data to smart irrigation systems or other IoT/smart home devices.

# Securely share your data

- Contribute your weather data to the global WeatherLink community.
- ٠ via the WeatherLink website and mobile applications.
- like Weather Underground or CWOP.
- Build your own weather tools with our powerful suite of API products.

# Enjoy real-time data

Experience the fastest reporting weather data on the market with any personal device.

# Never lose data

- Safeguard recorded data with WeatherLink Live's internal auxiliary memory.
- Protect against data loss with redundant battery backup.

# Effortless setup

- Simple Bluetooth setup using the WeatherLink app.
- No Wi-Fi? No problem. Easily connect to Ethernet with the included cable.

# Long-range wireless data

Depend on Davis's industry-leading, proprietary, frequency-hopping, spreadspectrum radio to transmit data up to 1,000 ft. (300 m).



# 80+

Connected sensors to one WeatherLink Live

10 +Different sensor types

**1,000** ft.

Listen to 8 transmitters

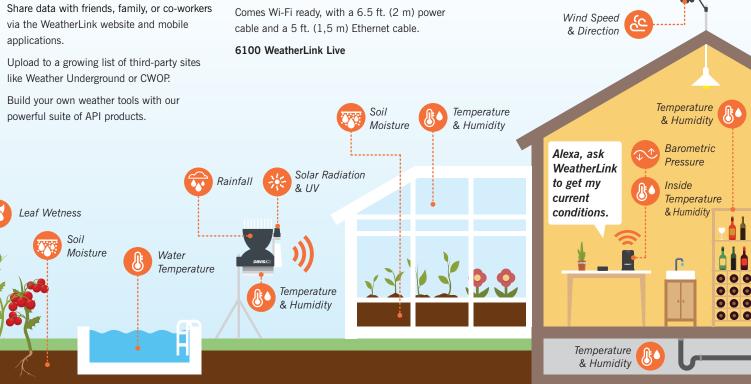
(300 m) Transmission distance



Stream live data

enabled

Note: WeatherLink Live is not compatible with WeatherLink Computer Software.



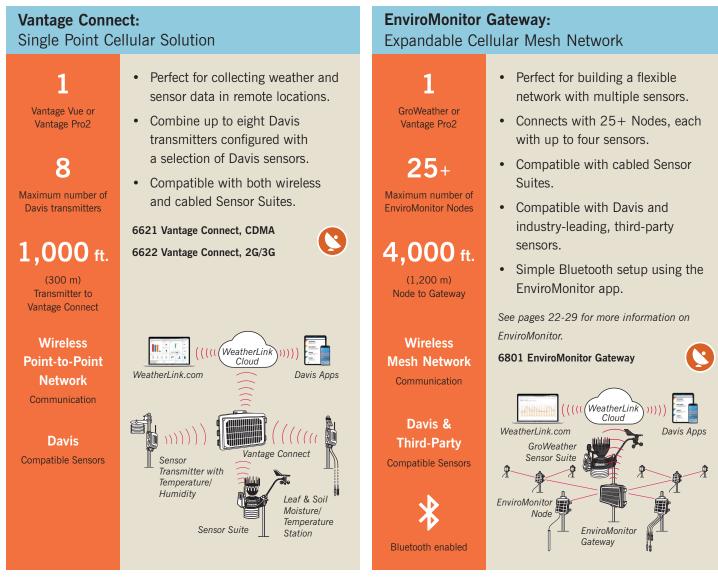
# **Remote cellular telemetry solutions**

Vantage Connect and the EnviroMonitor Gateway combine cellular technology with an integrated data logger to transmit real-time sensor data to the WeatherLink Cloud. From there, you can view data on WeatherLink and Mobilize apps.

These units are self-contained, weather-resistant, and powered by a 5-watt solar-panel. They include a 6-volt rechargeable battery and come with mounting hardware.



Vantage Connect/ EnviroMonitor Gateway



# Annual Service Plan

Each Vantage Connect and EnviroMonitor Gateway/Node requires an Annual Service Plan. Annual subscriber fees depend on the selected update interval frequency. The Vantage Connect and EnviroMonitor Gateway require a one-time activation fee (#6645).

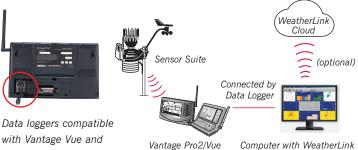
|            | VANTAGE CONNECT |              | ENVIROMONITOR GATEWAY & NODES |             |              |                        |      |  |  |  |  |
|------------|-----------------|--------------|-------------------------------|-------------|--------------|------------------------|------|--|--|--|--|
| Update     | Annual Serv     | vice Charge/ | Update                        | Annual Serv | vice Charge/ | Annual Service Charge/ |      |  |  |  |  |
| Interval   | Product         | Number       | Interval                      | Product     | Number       | Product Number         |      |  |  |  |  |
|            | Per Vantag      | ge Connect   |                               | Per Ga      | ateway       | Per Node               |      |  |  |  |  |
| 5 minutes  | Call            | 6632A        | 5 minutes                     | Call        | 6892         | Call                   | 6882 |  |  |  |  |
| 15 minutes | Call            | 6634A        | 15 minutes                    | Call        | 6894         | Call                   | 6884 |  |  |  |  |
| 60 minutes | Call            | 6636A        | 60 minutes                    | Call        | 6896         | Call                   | 6886 |  |  |  |  |

# WeatherLink USB and Serial Data Loggers

The USB and Serial Data Loggers connect the console to a computer running WeatherLink Computer Software. Optionally upload data to the WeatherLink Cloud with an internet-connected computer that is on and running the software. Free Windows and Mac WeatherLink Computer Software is available for download on WeatherLink.com.

6510USB USB Data Logger 6510SER Serial Data Logger





with Vantage Vue and Vantage Pro2 consoles.

Computer with WeatherLink Computer Software Console Installed

# Weather Envoy<sup>™</sup>

Receive data from a Vantage Pro2 Sensor Suite, a Vantage Vue Sensor Suite, or other Sensor Transmitters. Use with a required WeatherLink data logger to push data securely to the WeatherLink Cloud and access for FREE on WeatherLink.com and the WeatherLink Mobile app. From there you can view, share, compare, and download data. With the WeatherLink Computer Software, you can collect and store data from the outdoor sensors and download it directly to your computer.

6316 Wireless Weather Envoy 6316C Cabled Weather Envoy



# Use the data collection device that's right for you









WeatherLink Live

WeatherLink USB WeatherLink Serial

Vantage Connect

EnviroMonitor Gateway

| Data transmission  | Wi-Fi/Ethernet        | USB                             | Serial                          | Cellular                 | Cellular                 |
|--|-----------------------|---------------------------------|---------------------------------|--------------------------|--------------------------|
| Data upload to WeatherLink Cloud<br>requires computer and software<br>running 24/7 | No                    | Yes                             | Yes                             | No                       | No                       |
| Streams live data within LAN   | Yes                   | No                              | No                              | No                       | No                       |
| Typical installation location*   | Indoor                | Indoor                          | Indoor                          | Outdoor                  | Outdoor                  |
| Console or Envoy required  | No                    | Yes                             | Yes                             | No                       | No                       |
| Storage capacity**   | 180 days              | 104 days                        | 104 days                        | 90 days                  | 180 days                 |
| Power source   | AC/battery<br>back-up | AC/battery via<br>Console/Envoy | AC/battery via<br>Console/Envoy | Solar/battery<br>back-up | Solar/battery<br>back-up |
| Annual service plan required   | No                    | No                              | No                              | Yes                      | Yes                      |
| Product Number   | 6100                  | 6510USB                         | 6510SER                         | 6621 or 6622             | 6801                     |

\*Data loggers noted as indoor can be installed in a Solar Power Kit for use outdoors. (See page 34.)

\*\*Based on data from one Sensor Suite at a 15-minute archive interval.

# Data Viewing

# **Choose Your View**

Access, analyze, share, and compare your weather data from any connected device, console, or desktop computer. Customize your bulletin dashboard of current conditions, use forecasts, chart historical data, and share your data with the WeatherLink Network and beyond.





WeatherLink *Mobile App* 

WeatherLink.com

Web



Mobilize <u>Mobile</u> App



WeatherLink Computer Softwar

Console

**P18** 

# WeatherLink: Best-in-class meteorological data viewing

Our data-viewing options give you access to WeatherLink.com and apps from anywhere on any device via the WeatherLink Cloud or by downloading the WeatherLink Computer Software directly to your computer. You can also combine these two options. Both options are completely FREE, with the ability to upgrade based on your data needs. Pair your software needs with a compatible data-collection device to view and record weather and sensor data.

# WeatherLink Cloud

The WeatherLink Cloud family of products offers the ultimate in versatility for access to your data. With the completely FREE Basic tier you can view



current conditions on WeatherLink.com or the WeatherLink Mobile app anywhere, on any internet-connected device.

Upgrade to a Pro account for access to all historical data, charting, and raw data exports for a full-featured analysis tool.

WeatherLink Cloud is compatible with all Davis data-collection products. See page 17 for details.

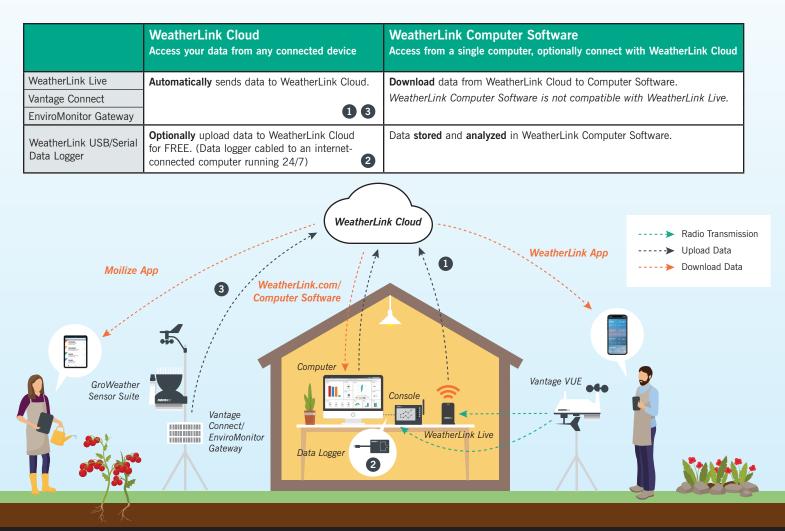
# WeatherLink Computer Software

The FREE WeatherLink Computer Software is available for download with a FREE WeatherLink.com account. It allows you to store data directly on your computer's hard drive. The software package includes the ability to graph



multiple variables and export data to popular spreadsheet and database programs.

Use an internet-connected computer turned on 24/7 to share data with the WeatherLink Cloud for FREE. (Data logger required.)



# WeatherLink.com: All of your data, on the web



View current conditions bulletin dashboards from the global WeatherLink Network of public stations. Free with Basic

Use the chart feature to compare multiple weather data variables at the same time. Upgrade to Pro

Build a custom weather view on the bulletin dashboard. Free with Basic

# WeatherLink Basic

With the completely FREE WeatherLink Basic account you get a versatile tool to monitor current conditions at home or around the world.

- Create a custom bulletin dashboard of current conditions with 16+ different data types.
- Share a secure station URL for anyone to view your weather data. No account required to view.
- View local weather forecasts.
- Access the global WeatherLink Network of public stations on the map.
- Upload data to third-party sites, like Weather Underground, Globe, and CWOP.
- · Get e-mails and text alerts with preset alarms.
- Use the API to access weather data in XML or JSON formats.

# WeatherLink App

View your current and forecast conditions from your station and the WeatherLink Network of public stations around the world, all from a mobile phone or tablet.

# FREE with WeatherLink Basic.

Search "Davis WeatherLink Mobile" on iOS and Android app stores.









Enhance your WeatherLink experience by upgrading to Pro. Becoming a Pro unlocks a powerful set of tools.

- Visualize multiple data points at once with historical data in charts.
- Analyze and download all raw data records.
- Increase data speeds for third-party uploads and API usage.
- Pro share a station to give Pro capabilities to up to six friends or colleagues.
- Use Mobilize web and mobile tools for smart farming and gardening.



# Mobilize App

Developed to help commercial growers with critical decisions, Mobilize gives any farmer or sophisticated gardener the power to track site-specific conditions related to irrigation, weather, frost, and more. See pages 26-27 for details.

Upgrade to Pro to use Mobilize.







# WeatherLink.com: Plans and pricing

|                                      | BASIC          | PRO                   | PRO+                   |
|--------------------------------------|----------------|-----------------------|------------------------|
|                                      | <b>\$0</b> /mo | Call for Price        | Call for Price         |
| <sup>1</sup> Current Conditions      | $\checkmark$   |                       | $\checkmark$           |
| ² Map                                |                | $\checkmark$          | $\checkmark$           |
| <sup>3</sup> Chart                   | ×              | $\checkmark$          | $\checkmark$           |
| ⁴ Data                               | ×              | $\checkmark$          | $\checkmark$           |
| <sup>5</sup> Mobilize                | ×              | $\checkmark$          | $\checkmark$           |
| <sup>6</sup> Device Upgrades         | 0              | 3                     | 10                     |
| <sup>7</sup> Pro Shares              | 0              | 6 per upgraded device | 10 per upgraded device |
| <sup>8</sup> Third-Party Upload Rate | 15 minutes     | 5 minutes             | Up to 1 minute         |

**1. Current Conditions:** Build and customize your bulletin dashboard to receive current data updates from all of your installed sensors. You can move and resize tiles to see the data just the way you like it.

**2. Map:** Use the WeatherLink map to view and interact with the community of public stations in our worldwide WeatherLink Network. Click on a station to see a summary of current data and click "bulletin" to see the station's customized weather dashboard.

**3. Chart:** Visualize any of your sensor data with custom line and bar charts on up to four different y-axes. Zoom into an hour of data or out to a full year to view details and trends.

**4. Data:** Access all of your raw sensor data at the click of a button. You can sort by date/time or data type and export any data set directly to an Excel-friendly .csv file.

# Vantage Consoles: **Dynamic data**visualization tools

Davis consoles have been the primary window to real-time weather data for many users. The industrial-grade devices are loaded with features far beyond any other on the market. Displaying current conditions is just the beginning. From the user-friendly keyboard to the backlit screen, these consoles allow you to graph up to 80 different parameters and set up to 70 different alarms simultaneously. With some of the fastest updates (as fast as every 2.5 seconds) and a wireless transmission distance of up to 1,000 ft. (300 m), it's easy to understand why Davis consoles are trusted tools. See page 32 for details.

**5. Mobilize:** Use the Davis Mobilize app on iOS or Android to create custom frost, weather, crop, IPM, and irrigation reports to view on WeatherLink.com and mobile. It's robust enough to protect your farm crop from frost—and fun for the data-savvy backyard gardeners looking to perfect their tomato crop.

**6. Device Upgrades:** Upgrade a device to access historical data, charting, and the ability to Pro Share.

**7. Pro Shares:** Pro Share your device to give another user access to historical data and charting.

**8. Third-Party Upload Rate:** This is the rate at which you can upload your device's data to a third-party site such as Weather Underground, GLOBE, or CWOP.

Pro account is FREE with a Vantage Connect or EnviroMonitor Gateway Service Plan.



6312 Vantage Pro2 Console

6351 Vantage Vue Console

6351 Vantage Vue Console/Receiver 6312 Wireless Vantage Pro2 Console/Receiver Mobilize

Nodes

Sensors

Measure, Monitor, and Manage

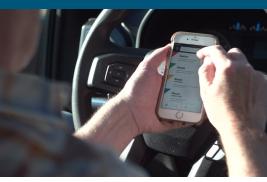
Easy to install, affordable, and third-party sensor compatible. Track site-specific weather and use the easily expandable EnviroMonitor system to build a custom network of sensors to help make critical crop decisions.

P22

# EnviroMonitor | Gateway and Node

# EnviroMonitor: Make critical decisions from anywhere at anytime

EnviroMonitor is a simple and cost-effective way to get critical field data continuously transmitted from the field to your mobile devices or computer. Get the timely and meaningful information you need to manage your crops, reduce risks, and save money.







EnviroMonitor Node

# EnviroMonitor Gateway

The EnviroMonitor Gateway collects all essential data from the Nodes and pushes it securely to the WeatherLink Cloud using cellular connectivity. The data can then be accessed on your smart devices and computers. The solar-powered, cellular Gateway includes a 5-watt solar panel and a rechargeable 6-volt backup battery encased in a weather-resistant housing. Mounting hardware is included. Requires an Annual Service Plan and a one-time activation fee. (See Annual Service Plans on page 29 for details.)

6801 EnviroMonitor Gateway

# **EnviroMonitor Nodes**

Nodes connect over a self-optimizing mesh network and transmit critical sensor data to the EnviroMonitor Gateway. The solar-powered Node is self contained and weather resistant. Includes a 3-watt solar panel and mounting hardware. Each EnviroMonitor network can host 25+ Nodes.

Nodes communicate with each other, allowing complete network flexibility around barriers and across distances.

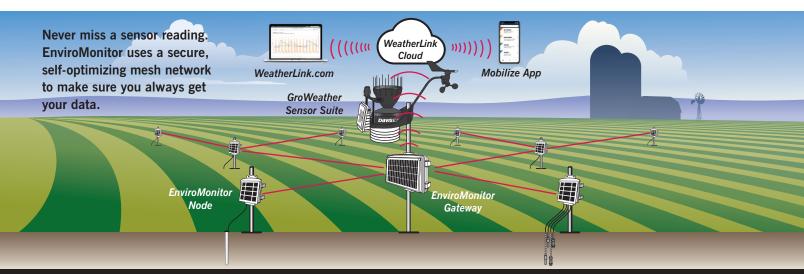
### 6810 EnviroMonitor Node

# Node Features

- Connect up to 4 sensors to each Node
- Communication range: Up to 4,000 ft. (1,200 m), Node-to-Node and Node-to-Gateway

Note: Range varies with terrain and environment

- Configures easily with a smartphone
- Rechargeable lithium-ion battery (included) powers the unit at night
- 4 D-cell batteries (not included) provide backup



# Easily Expandable: EnviroMonitor is compatible with hundreds of different Davis and third-party sensors



# It all starts with the weather

Connect a cabled Davis Sensor Suite to the Gateway to get all the benefits of complete weather monitoring. These rugged, low-maintenance Sensor Suites are available with Solar and/or UV Sensors and a variety of radiation shield options.

Soil

Salinity

Flow Meter

Wind Speed

& Direction

Section Management

Drsense

Water Level

Solar

Radiation

Rainfall

METER ENVIRONMENT **Dwyer** (Gems

5

Wetness

EnviroMonitor

Node

NASON

Seametrics

TRANSDUCERS

See pages 10-11 for Sensor Suite details.

6820C GroWeather Cabled Sensor Suite, with Solar Radiation Sensor

6327C Vantage Pro2 Plus Cabled Sensor Suite, with Solar Radiation and UV Sensors

6322C Vantage Pro2 Cabled Sensor Suite

Soil

Temperature

 $\bigcirc$ 

Pressure

Switch

Temperature

Soil

Moisture

( )

Pressure

Sensor

Temperature

& Humidity

AquaChecl

**IRR** METER

Sentek

# Expand effortlessly with Davis and third-party sensors

Each Node can support up to four sensors from Davis and other leading sensor manufacturers. EnviroMonitor is an open-sensor platform that is compatible with hundreds of industry-leading sensors from the manufacturers you know and trust.

See pages 33-35 for Davis sensors.

# Compatibility

EnviroMonitor is compatible with SDI-12, analog voltage (i.e. 0-3V; 0-5V; 0-12V), contact closure, pulse, and I2C sensors. We are constantly integrating new sensors to expand the capabilities of the EnviroMonitor platform and software.

Please contact us if you would like a sensor added.

Supported Sensors: www.davisinstruments.com/em-sensors

# Easy to Install



Install and manage your entire EnviroMonitor sensor network with Davis Instruments' EnviroMonitor iOS and Android app. **Download for FREE!** 

See page 27 for more information on the EnviroMonitor app.

# Measure, Monitor, and Manage



Track all of the data from your EnviroMonitor sensor network with Davis Instruments' Mobilize iOS and Android app. **Download for FREE!** 

See pages 26-27 for more information on the Mobilize app.

# Use Case: Getting to the root of the issue

Located in California's beautiful Livermore Valley, this historic boutique winery was built in 1889 and is still producing award-winning wines.



To help use resources wisely and reduce the damage brought on by environmental conditions, they recently installed an EnviroMonitor system.

# The system includes:

- 1 EnviroMonitor Gateway (6800)
- 1 GroWeather Sensor Suite (6820C)
- 4 EnviroMonitor Nodes (6810)
- 3 Watermark<sup>™</sup> Soil Moisture Sensors (6440)
- 1 Leaf Wetness Sensor (6420)
- 1 Temperature/Humidity Sensor (6830)
- 2 Sentek<sup>™</sup> Soil Moisture Probes
- 4 Gems<sup>™</sup> Pressure Switches
- 1 Decagon/Meter™ Soil Moisture Sensor
- 1 Aquacheck<sup>™</sup> Soil Moisture Probe



Water is a precious resource in drought-stricken California. With pressure switches and soil moisture sensors, the grower knows when the irrigation system is on and runs it only long enough to penetrate the vines' roots. The Leaf Wetness and Temperature/Humidity Sensors give the team insights on conditions where the grapes are growing. With forecasted data in hand, they can take actions to reduce damage caused by frost, freezing conditions, and heat while tracking chill portions, growing degree days, ET, and much more.

With this installation, the team has the data they want and the ability to add additional Nodes and sensors when they're ready.

The Fenestra Winery installation has been made publicly available for viewing on WeatherLink.com. Search for "Fenestra Winery" and click "bulletin" to view a selection of weather sensors.



Temperature/Humidity Sensor (6830)



Leaf Wetness Sensor (6420)



Gems Pressure Switch

# Mobilize: Critical field data delivered to your mobile phone

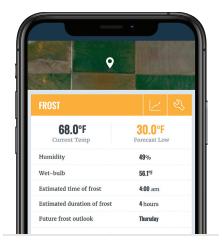
Mobilize is an agriculture-focused, decision-making app with some of the latest advancements in agronomy. You can easily create custom views of your farm, receive alerts, and browse sensor data to track specific report conditions related to weather, frost, irrigation, growth cycle, pest management, and more.



# **Irrigation Management**

Track soil moisture levels to know when, where, and how much to irrigate.

- Custom soil moisture thresholds
- Irrigation alerts
- Evapotranspiration (ET) data
- Past and forecast rain totals



# **Frost Tracking**

Precise forecasting allows you to stay ahead of critical conditions.

- Forecast frost conditions
- View real-time temperature threshold alerts
- Wet-bulb temperature (coming soon) and humidity tracking



# **Crop Management**

Track key growing degree day (GDD) and chill requirements against custom targets by crop type.

- Chill and growing degree day progress tracking
- Integrated forecasts for planning

# WeatherLink.com: Your field data, your way

WeatherLink.com is the web-based portal for accessing all of your EnviroMonitor data. The website displays reports created in Mobilize and provides more ways to utilize your sensor data.

- Build a custom bulletin dashboard of visual data tiles to track key current conditions.
- Visualize any combination of field data in the chart section.
- Analyze all of your system data in the data section, or export the data into spreadsheet-compatible formats.
- Set custom alerts for specific sensors or calculated conditions.
- Generate and share a daily data summary with anyone on your team.
- Securely share field data with colleagues.



# Forecasting Solutions: Make decisions before problems occur

Mobilize integrates forecasts into reports to help predict growing degree days for harvest, forecast frost conditions before they occur, and estimate future rain to help save water. Decisions are easier when you know what is coming.



# Weather Monitoring

Improve daily decisions with real-time field conditions that help you plan with confidence.

- Spray confidently with locationspecific wind data
- Document extreme temperature conditions
- Collect in-field rain data



# **Integrated Pest Management**

Monitor pest/disease models specific to a long list of crops.

- Track Pest Risk Index
- Update IPM models with remediation actions
- Track past, current, and future pest stages

Temperature, Humidity and Leaf Wetness sensors and Pro+ WeatherLink plan required.



# Free Form Report

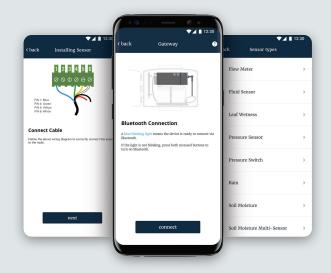
Build a custom report using any Nodes and sensors connected to a specific Gateway.

- Identify key variables to call out at top of report
- Easy-to-read data list of current data readings

# EnviroMonitor: Effortless configuration

The EnviroMonitor configuration app is used to easily install, monitor, and interact with your EnviroMonitor hardware and sensor systems.

- Securely connect to Gateways and Nodes with your phone via Bluetooth.
- Easily install and modify sensor configurations on Gateways and Nodes.
- Quickly determine mesh network and Gateway cellular connection strength.
- Remotely identify and troubleshoot any sensor issues.
- Share system access with team members to allow the ability to modify or view specific systems.



# EnviroMonitor for any application

Build your own or pick from our application-specific systems. No matter how you configure your system, EnviroMonitor provides more features for a lower cost than the competition.

Sens

Ann (15-m Activ

Envi

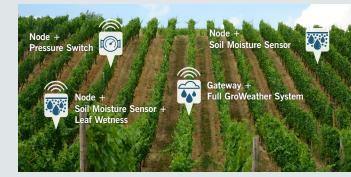
Mob Agri

Opti

**Applications** 



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# Vineyard

Set up sensors to trigger alerts when frost is a threat. Stay on top of irrigation needs with soil moisture sensors and a pressure switch.



# Center Pivot

Irrigation is what matters most. Soil moisture sensors throughout the farm will help determine when and how much to irrigate.





Monitor additional irrigation sets:

Monitor multi-level soil moisture:

Upgrade to third-party soil moisture

Monitor Pump Flow

Add Node B and sensors

profile probe

| Irrigation System<br>Monitor weather and a single<br>irrigation set  | Advanced Irrigation System<br>Monitor weather, pump flow and two<br>irrigation sets   |
|--|---|
| <ul> <li>EnviroMonitor Gateway (6800)</li> <li>EnviroMonitor Node (6810) <ul> <li>3 Soil Moisture Sensors (6440)</li> <li>Pressure Transducer <ul> <li>(third-party)</li> </ul> </li> <li>GroWeather Sensor Suite (6820C)</li> </ul></li></ul> | <ul> <li>EnviroMonitor Gateway (6800)</li> <li>GroWeather Sensor Suite (6820C)</li> <li>EnviroMonitor Node A (6810) <ul> <li>Flow Meter (third-party)</li> <li>Pressure Transducer (third-party)</li> </ul> </li> <li>2x EnviroMonitor Node B (6810) <ul> <li>3 Soil Moisture Probes (6440)</li> <li>Pressure Transducer (third-party)</li> </ul> </li> </ul> |
| —  | —   |
| —  | —   |
| Call   | Call  |
| Farm Weather Plus: <ul> <li>Irrigation Set Monitoring</li> </ul>   | Farm Weather & Irrigation System Plus:<br>• Multiple Irrigation Set Monitoring  |

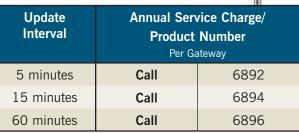
# **Annual Service Plans**

The annual fee is calculated for each Gateway and Node activated and billed on a single anniversary date. EnviroMonitor offers three upload interval choices to meet your needs. A Gateway requires a one-time activation fee (#6645).

Contact us directly for annual service plan information and availability for customers outside the US.



# Plans for Gateway





# Plans for Node

| Update<br>Interval | Product | vice Charge/<br>Number<br>Node |
|--------------------|---------|--------------------------------|
| 5 minutes          | Call    | 6882                           |
| 15 minutes         | Call    | 6884                           |
| 60 minutes         | Call    | 6886                           |



# Greenhouse and Nursery

Control Irrigation Costs

Monitor multi-level soil moisture: Upgrade to third-party soil moisture

Monitor additional irrigation sets:

Add Node and listed sensors

and Overuse

profile probe

Monitor the weather conditions on your site. Measure temperature and humidity inside each greenhouse for a holistic approach to decision-making.

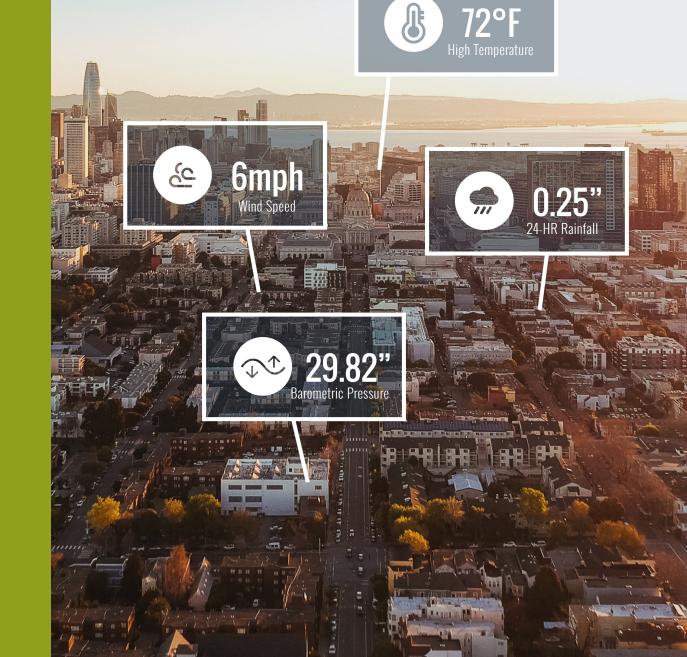


# **Row Crops**

Monitoring soil moisture is crucial for effective and economic irrigation. Add precise current weather data to track growing degree days.

# **Exceptional Sensors, Easy Integration**

Easily create a flexible network of sensors to measure a wide variety of conditions: rain, wind, temperature, humidity, and more. Whether you're installing sensors throughout your yard, across the city, or covering an entire state, Davis has a solution that's right for you.

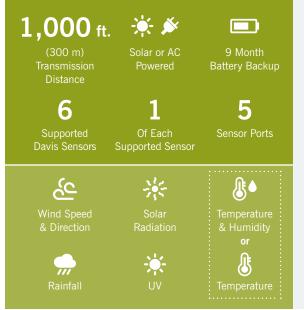




# Build a custom network of Davis sensors

Add Sensor Transmitters to your WeatherLink Live, Vantage Connect, Weather Envoy and Vantage Pro2 Console to create a custom network of sensors designed to measure your specific environment.





# Sensor Transmitters

Sensor Transmitters are the building blocks of your custom network of sensors. They can be positioned indoors or outdoors and are capable of transmitting data up to 1,000 ft. (300 m). Each transmitter can support up to five sensors, including an Anemometer, Rain Collector, Temperature Probe or Temperature & Humidity Sensor, UV Sensor and Solar Radiation Sensor.

Combine Sensor Transmitters with a WeatherLink Live to take full advantage of the devices' capabilities.

See the ST symbol on pages 33-34 for compatible sensors and page 41 for transmitter configuration options.

Includes transmitter in weather-resistant housing, mounting hardware, solar panel, and backup battery.  $% \left( {{\left[ {{{\rm{D}}_{\rm{T}}} \right]}_{\rm{T}}} \right)$ 

6332 Solar-Powered Wireless Sensor Transmitter

Includes transmitter in weather-resistant housing, mounting hardware, backup battery, and 6.5 ft. (2 m) power adaptor cable.

NEW 6331 AC Powered Wireless Sensor Transmitter

# Wireless Leaf & Soil Moisture/Temperature Station

Robust enough for large-scale agriculture and simple enough for backyard gardening. A fully-populated station can have two Leaf Wetness Sensors, four Soil Moisture Sensors, and four Temperature Probes. Available in two weather-resistant models, without sensors (6345) or with sensors (6345CS). Compatible with 2-Wire Termination Stainless Steel Temperature Probe (6470).

See the SM symbol on page 33 for compatible sensors.

Includes transmitter in weather-resistant housing, mounting hardware, solar panel, and backup battery. Add sensors that meet your requirements.
6345 Wireless Leaf & Soil Moisture/Temperature Station (without sensors)

Includes transmitter in weather-resistant housing, mounting hardware, solar panel, backup battery, 4 soil moisture sensors, and 4 temperature probes. 6345CS Complete Wireless Soil Moisture/Temperature Station with 4 Soil Moisture Sensors and 4 Temperature Probes



# **Applications**

- Pool
- Greenhouse
- Basement/crawl space
- Garage
- · And many others



Separate the Vantage Pro2 Anemometer up to 1,000 ft. (300 m) with a Sensor Transmitter.



Use a Wireless Leaf & Soil Moisture/ Temperature Station to monitor important growing conditions.



Monitor temperature and humidity where it matters most.

# Add another console to any room

# Vantage Vue and Wireless Vantage Pro2 Console

Add additional Vantage Vue or Vantage Pro2 Consoles to display weather data in the den, bedroom, kitchen—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 your console as a repeater, retransmitting the data from one console to another and extending the transmission range up to another 1,000 ft. (300 m). With Vantage Pro2 only, an additional console can receive data directly from any of our sensor transmitters (see page 31 & 41 for additional details).



Use your console as a repeater to transmit data from one console/receiver to another.

### 6351 Vantage Vue Console/Receiver



6312 Wireless Vantage Pro2 Console/Receiver





# Extend the range of your wireless station for miles on end

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 Sensor Suite, or Sensor Transmitter. You can also 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, except WeatherLink Live.

# Long-Range Wireless Repeater

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. Range varies



depending on antenna height, the terrain and foliage, buildings, other man-made structures, and RF interference. Ideal for agricultural or research applications where long distances are an issue. Solar-powered with lithium backup battery (included). Antennas are sold separately.



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

| REPEATER DISTANCES  |            |  |           |        |  |  |  |  |  |  |  |  |  |
|---------------------|------------|--|-----------|--------|--|--|--|--|--|--|--|--|--|
| Antenna Combination | Multiplier | Maximum Transmission Distance<br>under optimal conditions ** |           |        |  |  |  |  |  |  |  |  |  |
| Dipole – Dipole *   | 1.00       | 1000'  | 0.2 mile  | 300 m  |  |  |  |  |  |  |  |  |  |
| Dipole – Omni       | 1.58       | 1580'  | 0.3 mile  | 475 m  |  |  |  |  |  |  |  |  |  |
| Dipole – Yagi       | 3.16       | 3160'  | 0.6 mile  | 950 m  |  |  |  |  |  |  |  |  |  |
| Omni – Omni         | 2.50       | 2500'  | 0.5 mile  | 750 m  |  |  |  |  |  |  |  |  |  |
| Omni – Yagi         | 5.00       | 5000'  | 1.0 mile  | 1500 m |  |  |  |  |  |  |  |  |  |
| Yagi – Yagi         | 10.00      | 10,000'  | 1.9 miles | 3000 m |  |  |  |  |  |  |  |  |  |

- <sup>c</sup> Dipole antennas are found on all Davis wireless weather stations and 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 Repeater

For use with our long-range repeater. 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 Yagi Antenna

# **Standard Wireless Repeater**

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 is 200 ft. to 400 ft. (60 to 120 m). Solar-powered with lithium backup battery (included).

7627 Standard Wireless Repeater, Solar-Powered

COMPONENTS NOT SHOWN TO SCALE

# Sensors



# 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 speeds of 200 miles per hour (322 km/h). Sealed stainless steel ball bearings for long life. Comes complete with mounting hardware. Includes 40 ft. (12 m) cable.

### 6410 Anemometer

NIST 🕕 EM ST

# 2. Turbo Meter™

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

271 Turbo Meter



# 3. AeroCone<sup>®</sup> Rain Collector with Flat Base\*

Designed to meet the guidelines of the World Meteorological Organization, our self-emptying rain collector is exceptionally accurate. Measures in 0.01" or 0,2 mm increments. Flat Base makes mounting to flat surfaces easy. Includes mounting hardware and 40 ft. (12 m) cable, bird spikes, and debris screen.

6463 Rain Collector

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# 4. AeroCone<sup>®</sup> Rain Collector with Mountable Base\*

Uses the Vantage Pro2 base for easy mounting on a pole, post, or flat surface. Meets the guidelines of the World Meteorological Organization. Measures in 0.01" or 0,2 mm increments. Includes mounting hardware and 40 ft. (12 m) cable, bird spikes, and debris screen.

6465 Rain Collector with Mountable Base





# 5. Leaf Wetness Sensor\*

Use to monitor the level of surface moisture on foliage 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



# 6. New Temperature/Humidity Sensor\*

Features both temperature and humidity sensors inside a protective housing. Ideal for indoor use. Includes mounting hardware, and 25 ft. (7,6 m) cable.

6834 Temperature/Humidity Sensor



# 7. Temperature/Humidity Sensor with Radiation Shield\*

Features both temperature and humidity sensors inside a radiation shield which protects the sensors from solar radiation and other sources of radiated and reflected heat. Includes 6 plates, hardware for mounting on a fence post or pole, and 25 ft. (7,6 m) cable.

6830 Temperature/Humidity Sensor with Radiation Shield

# 8. Temperature/Humidity Sensor with 24-Hour Fan-Aspirated Radiation Shield\*

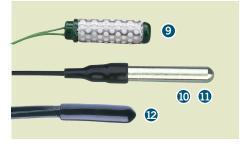
Features both temperature and humidity sensors inside the 24-Hour Fan-Aspirated Radiation Shield which protects the sensors from solar radiation and other sources of radiated and reflected heat. This model includes a solar panel to power the motor-driven fan. Includes 10 plates, hardware for mounting on a fence post or pole, and 25 ft. (7,6 m) cable.

### 6832 Temperature/Humidity Sensor with

24-Hour Fan-Aspirated Radiation Shield



\*Sensor comes with RJ Connector. RJ Connector Node Adaptor (part #6860) needed when using with EnviroMonitor.



# 9. Soil Moisture Sensor

Uses electrical-resistance Watermark soil moisture sensor to measure the moisture level of the soil. Does not require periodic maintenance during the growing season. Simply bury at the desired depth to 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



# **10. Stainless Steel Temperature Probe** with 2-Wire Termination

Multi-purpose temperature probe with 2.5" (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 Stainless Steel Temperature Probe with 2-Wire Termination



# 11. Stainless Steel Temperature Probe with RJ Connector\*

Multi-purpose temperature probe with 2.5" (64 mm) long stainless steel housing. Use to measure temperature of air, soil, or water. Use with Weather Envoy or Sensor Transmitters. Includes 25 ft. (7,6 m) cable.

6475 Stainless Steel Temperature Probe with RJ Connector



# 12. Temperature Probe with RJ Connector\*

Temperature probe with durable plastic housing. Use to measure temperature of air, soil, or water. Use with Weather Envoy or Sensor Transmitters. Includes 25 ft. (7,6 m) cable.

6477 Temperature Probe with RJ Connector





\*Sensor comes with RJ Connector. RJ Connector Node Adaptor (part #6860) needed when using with EnviroMonitor.

See pages 10-11 for our line of Sensor Suites. See page 42 for extension cables and maximum cable lengths.

# 13. Solar Radiation Sensor\*

Measures the intensity of solar irradiance, enabling display of incident power (Watts per square meter) and cumulative energy (Langleys). Diffuser element and housing are designed specifically for accurate cosine response. Silicon photo diode provides a 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, use the Sensor Mounting Shelf. Use the Universal Mounting Bracket for other applications. Includes 2 ft. (0.6 m) cable.

6450 Solar Radiation Sensor

14. UV Sensor



Measures the intensity of the sunburning portion of the UV spectrum (UVA and UVB), closely matching the Erythema Action Spectrum. Allows you to display UV index, dose rate, and daily and accumulated dose. Latest-technology transducer and newly-designed electronics provide greater accuracy and stability. The comb structure provides improved cosine response accuracy at zenith angles up to 90 degrees. Two-piece housing minimizes radiation heating, allows convective cooling of the sensor, and prevents the trapping of water or dust. To mount next to a Rain Collector, use the Sensor Mounting Shelf. Use the Universal Mounting Bracket for other applications. Includes 2 ft. (0,6 m) cable.

6490 UV Sensor PATENTED



# 15. 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 of the Vantage Pro2 Sensor Suite.

### 6673 Sensor Mounting Shelf

### 16. Universal Mounting Bracket

For mounting a Solar Radiation Sensor, UV Sensor, or Radiation Shield (7714). Bracket is pre-drilled for easy mounting. Includes mounting hardware.

6670 Universal Mounting Bracket



EM

# Accessories



See www.davisinstruments.com/weather/uses to view various ways to use these kits and shelter.

# 1. Solar Power Kit

Large solar panel powers a Wireless Console or Weather Envoy inside a weather-resistant shelter. (Outdoor sensors are powered by the solar panel on the Sensor Suite). Includes a 5-watt solar panel, weather-resistant shelter, regulator circuit, 1.4-amp-hour 6-volt rechargeable battery, mounting hardware, and 10 ft. (3 m) cable.

### 6614 Solar Power Kit

# 2. Heavy-Duty Solar Power Kit

Our large solar panel and a 12-amp-hour battery provide enough power for a Cabled Console and outdoor Sensor Suite or Wireless Console where more power is needed. There is enough room inside the weather-resistant shelter to mount a Weather Envoy. When used with a Vantage Vue or Vantage Pro2 Console, mount the Console inside a Universal Shelter. Includes 5-watt solar panel, weather-resistant shelter, regulator circuit, 12-amp-hour 6-volt rechargeable battery, mounting hardware, and 10 ft. (3 m) cable.

6612 Heavy Duty Solar Power Kit

# 3. Extra Solar Panel Kit

Provides additional charging power to the battery in your Solar Power Kit (6612 or 6614), Vantage Connect, or EnviroMonitor Gateway for installations where sunlight is limited. The 5-watt solar panel is mounted on a weather-resistant shelter in which a console or Envoy can be mounted. Includes 5-watt solar panel, weatherresistant shelter, mounting hardware, and a 4 ft. (1,2 m) cable.

### 6616 Extra Solar Panel Kit

# 4. Universal Shelter

Protects console and other components located outdoors. Weather-resistant enclosure provides protection from the elements for a Vantage Pro2 console or Vantage Vue console with or without a WeatherLink data logger, or for a Weather Envoy with WeatherLink data logger. Includes mounting hardware. Measures  $13.75" \times 10" \times 4.18"$  (34,9 cm x 25,4 cm x 10,6 cm).

6618 Universal Shelter



# 5. Shelter Angle Bracket

Changes the EnviroMonitor Gateway, Vantage Connect, or Universal Shelter solar panel's angle from 5 degrees to 30 degrees to increase efficiency at lower latitudes. Includes mounting hardware.

6671 Shelter Angle Bracket

# 6. AC Charger Kit

Charges the battery in a Vantage Connect or EnviroMonitor Gateway where sunlight is too low to use solar. Includes 5.5 ft. (1,6 m) cable.

6710 AC Charger Kit

# 7. Rain Collector Heater

For older Sensor Suites that do not have the AeroCone. Heater and insulation fit neatly inside the old style rain collector. 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, AC-power adaptor, and 50 ft. (15 m) cable.

7720 Rain Collector Heater (no rain collector)

# 7 & 7a. Rain Collector and Heater

For Sensor Suites with an AeroCone. Temporarily replace your rain cone with a straight-sided rain cone in order to use the heater. In addition to components listed above (in 7), this product includes the rain collector, debris screen, and bird spikes.

7721 Rain Collector and Heater \$240

# 8. RJ Connector Node Adaptor

Connect sensors with RJ connectors to your EnviroMonitor Node with this adaptor.

6860 RJ Connector Node Adaptor





# 9. 3-volt Lithium Battery CR123

Replacement 3-volt lithium battery (CR123).

8415 3-volt Lithium Battery CR123 ST SM

# 10. 6-volt 12Ah Battery

Replacement 6-volt 12Ah battery for Vantage Connect or EnviroMonitor Gateway.

6712 6-volt 12Ah Battery

EM

EM

# 11. Radiation Shield

Received a 5-star rating from the World Meteorological Organization. Protects temperature sensors from solar radiation and radiated or reflected heat sources. Multi-plate construction for maximum airflow. Use with Leaf & Soil Moisture/ Temperature Station and all temperature sensors. Or, install your own sensor in the sensor chamber. Sensor chamber: 4.25" x 2.5" (107,9 mm x 63,5 mm). Includes 8 plates, mounting bracket, and mounting hardware.

7714 Radiation Shield Assembly required.

# 12. Daytime Fan-Aspirated Radiation Shield Kit

An economical way to add 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. With no backup battery, the fan only runs during daylight hours and will cease running at night when solar radiation effects are reduced. Includes fan, solar panel, additional radiation shield plates, and hardware.

7747 Daytime Fan-Aspirated Radiation Shield Kit PATENTED



# 13. New 24-Hour Fan-Aspirated Radiation Shield

Our patented, 24-Hour Fan-Aspirated Radiation Shield helps maximize accuracy of sensor 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, this solar-powered model runs on battery power and the airflow slows to 280 feet per minute (1,4 m/s). Install your own sensor in the sensor chamber. Sensor chamber: 2.24" x 3" (56,8 mm x 76,2 mm). Includes 10 plates, rechargeable batteries, mounting hardware, and 25 ft. (7,6 m) cable.

# 6838 24-Hour Fan-Aspirated

**Radiation Shield** 

EM

# 14. New Replacement Motor Kit without Batteries

Replacement motor for the Daytime Fan-Aspirated Radiation Shield. We recommend replacing every two years.

### 7758 Replacement Motor

# 15. New Replacement Motor Kit with Batteries

Replacement motor for the 24-Hour Fan-Aspirated Radiation Shield. Includes two rechargeable C-batteries. We recommend replacing every two years.

7758B Replacement Motor and Replacement Batteries \$70

# 16. USB Power Cord

Powers the Vantage Vue Console, Vantage Pro2 Console, WeatherLink Live or the Weather Envoy. Includes 6.5 ft. (2 m) cable.

6627 USB Power Cord

# Accuracy You Can Rely On

We subject our products to harsh environmental testing. Every station goes through a minimum of 10 tests before shipping. If it's Davis, its accurate and reliable.

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| . ,      |                                       | BAR                 | HI              | JMID             | ITY       |                 | RAIN              |           | TE                 | MPE                 | RATU       | RE         |            | WIND           | )                 |                    | W  | ITH          | OPTI          | ONAI            | SEN                 | VSOR              | S            |          |
|----------|---------------------------------------|---------------------|-----------------|------------------|-----------|-----------------|-------------------|-----------|--------------------|---------------------|------------|------------|------------|----------------|-------------------|--------------------|--|--------------|---------------|-----------------|---------------------|-------------------|--------------|----------|
| V        | antage                                |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          |                                       |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| L        | onsole                                |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                | pa                |                    |  |              |               |                 |                     |                   |              |          |
| С.       | aaturaa                               | nre                 |                 |                  |           |                 | It                |           | e                  | ture                |            |            |            |                | Speed             | Ę                  |  |              |               |                 | ra)                 | Vind              |              |          |
| Γ(       | eatures                               | Press               | dity            | hidity           |           | ount            | Amol              |           | eratu              | perat               |            |            |            | uo             | High              | iratio             | <tra)< td=""><td>s</td><td>0</td><td>ion</td><td>(Ext</td><td>-uns</td><td>_</td><td></td></tra)<> | s            | 0             | ion             | (Ext                | -uns              | _            |          |
|          | Vantage Pro2 and Vantage Vue          | tric F              | Humi            | Hun              | int       | Amo             | orm ,             | ate       | emp                | Tem                 | dex        | hill       | peed       | irecti         | n of              | ansp               | ty (E)   | etnes        | isture        | adiat           | ature               | S-un              | liatio       | SS       |
|          | Vantage Pro2 only<br>Vantage Vue only | Barometric Pressure | Inside Humidity | Outside Humidity | Dew Point | Rainfall Amount | Rain Storm Amount | Rain Rate | Inside Temperature | Outside Temperature | Heat Index | Wind Chill | Wind Speed | Wind Direction | Direction of High | Evapotranspiration | Humidity (Extra)   | Leaf Wetness | Soil Moisture | Solar Radiation | Temperature (Extra) | Temp-Hum-Sun-Wind | UV Radiation | MEDs     |
| _        |                                       | Ba                  | Ins             |                  |           |                 |                   | Rai       | Ins                |                     | He         |            |            |                |                   | ĒV                 | Η  | Le           |               |                 |                     |                   | 3            | ß        |
|          | Update Interval*                      | 1 min               | 1 min           | 50 sec           | 10 sec    | 20 sec          | 20 sec            | 20 sec    | 1 min              | 10 sec              | 10 sec     | 10 sec     | 2.5 sec    | 2.5 sec        | 2.5 sec           | 1 hour             | 50 sec   | 1 min        | 80 sec        | 50 sec          | 10 sec              | 10 sec            | 50 sec       | 50 sec   |
| СС       | ONSOLE DISPLAYS                       |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | Reading at end of update interval     | •                   | •               | •                | •         |                 |                   |           | •                  | •                   | •          | •          |            | •              |                   |                    | •  | •            | •             | •               | •                   | •                 |              |          |
|          | Total amount for the interval         |                     |                 |                  |           | •               | •                 |           |                    |                     |            |            |            |                |                   | •                  |  |              |               |                 |                     |                   |              | •        |
|          | Average reading for the interval      |                     |                 |                  |           |                 |                   |           |                    |                     |            |            | •          |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | High reading for the interval         |                     |                 |                  |           |                 |                   | •         |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| SE       | T ALARMS for                          |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | Special Alarms                        | 1                   |                 |                  |           | 2               | 3                 |           |                    |                     |            |            | 4          |                |                   | 5                  |  |              |               |                 |                     |                   |              | 6        |
|          | High Reading                          |                     | •               | •                | •         |                 |                   | •         | •                  | •                   | •          |            | •          |                |                   |                    | •  | •            | •             | •               | •                   | •                 | •            |          |
|          | Low Reading                           | F                   | •               | •                | •         |                 |                   |           | •                  | •                   |            | •          |            |                |                   |                    | •  | •            | •             |                 | •                   |                   |              |          |
| DI       | SPLAYED but not graphed               |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | Current Year High                     | •                   | •               | •                | •         |                 |                   |           | •                  |                     | •          |            | •          |                | •                 |                    | •  | •            | •             |                 | •                   |                   |              | Γ        |
|          | Current Year Low                      | •                   | •               | •                | •         |                 |                   |           | •                  |                     |            | •          |            |                |                   |                    | •  | •            | •             |                 | •                   |                   |              |          |
| GF       | RAPHED & DISPLAYED for last           | 24                  | hrs             | of               | eac       | :h o            | f th              | e fo      |                    | win                 | g (2       | 25         | hrs        | for            | Var               | Itae               | e V  | ue)          |               |                 |                     |                   |              |          |
| ۵.       | End-of-15-Minute Period Readings      | 1                   |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              | Γ        |
| ĒO       | End-of-Hour Period Readings           | •                   | •               | •                | •         |                 |                   |           | •                  | •                   | •          |            |            |                |                   |                    |  | •            | •             |                 |                     | •                 |              |          |
| _        | 15-minute Period Totals               |                     |                 |                  |           | •               |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | Hourly Totals                         | F                   |                 |                  |           | •               |                   |           | -                  |                     |            |            |            |                |                   | •                  |  |              |               |                 |                     |                   |              | •        |
| LS<br>LS | Daily Totals                          |                     |                 |                  |           | •               |                   |           |                    |                     |            |            |            |                |                   | •                  |  |              |               |                 |                     |                   |              | •        |
| OTAL     | Monthly Totals                        |                     |                 |                  |           | •               |                   |           |                    |                     |            |            |            |                |                   | •                  |  |              |               |                 |                     |                   |              |          |
| ۲        | Storm Totals (with start & end date)  |                     |                 |                  |           |                 | •                 |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
|          | Yearly Totals                         |                     | ⊢               |                  |           | •               |                   |           |                    |                     |            |            | $\vdash$   |                |                   | •                  |  |              |               |                 |                     |                   |              | $\vdash$ |
|          | 10-Minute Averages (2 min. for VV)    |                     |                 |                  |           |                 |                   |           |                    |                     |            |            | •          |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| ß        | Hourly Averages or Dominant           |                     |                 |                  |           |                 |                   |           |                    |                     |            |            | •          | •              | _                 |                    |  |              |               | •               |                     |                   | •            |          |
| RAGI     | Daily Averages or Dominant            |                     |                 |                  |           |                 |                   |           | -                  |                     |            |            |            | •              | •                 |                    |  |              |               | -               |                     |                   | -            |          |
| AVERAGES | Monthly Averages or Dominant          |                     |                 |                  |           |                 |                   |           | -                  |                     |            |            | -          | •              | •                 |                    |  |              |               |                 |                     |                   |              | -        |
| 4        | Yearly Averages                       |                     |                 |                  |           | -               |                   |           |                    |                     |            |            |            | -              | •                 |                    |  |              |               |                 |                     |                   |              | -        |
|          | One-Minute Highs                      |                     |                 |                  |           |                 |                   | •         | _                  |                     |            |            |            |                | _                 |                    |  |              | _             |                 |                     |                   |              |          |
|          | Hourly Highs                          |                     |                 |                  |           | -               |                   | •         | -                  |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              | -        |
| HIGHS    | Daily Highs                           |                     |                 |                  | •         | -               |                   | •         |                    | •                   | •          |            | •          |                |                   |                    |  | •            | •             | •               |                     |                   | •            |          |
| H        | Monthly Highs                         |                     | •               | •                | •         |                 |                   | -         |                    | •                   | •          |            | •          |                |                   |                    |  | •            | •             | •               |                     | •                 | •            |          |
|          |                                       | ŀ                   | F               | -                | -         | -               |                   | -         | -                  | •                   | -          |            | •          |                |                   |                    |  | -            | -             | -               |                     | -                 | -            | -        |
|          | Yearly Highs                          |                     |                 |                  |           |                 |                   | -         |                    | -                   |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| s        | Hourly Lows                           |                     |                 |                  |           | -               |                   |           |                    |                     |            | •          | -          |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| >        | Daily Lows                            | -                   | -               | •                | •         | -               |                   |           |                    | •                   |            | •          |            |                |                   |                    |  | •            | •             |                 |                     |                   |              |          |
| 8        | Monthly Louis                         |                     |                 |                  |           |                 |                   |           |                    |                     |            |            |            |                |                   |                    |  |              |               |                 |                     |                   |              |          |
| LOWS     | Monthly Lows<br>Yearly Low            | •                   | •               | •                | •         |                 |                   |           | •                  | •                   |            | •          |            |                |                   |                    |  |              | •             |                 |                     |                   |              |          |

### SPECIAL ALARMS

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



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

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# 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 approximately 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 provide this calibration service in our California factory utilizing NIST-traceable references for those customers who require it. For users who require this additional service, calibration of new and previously owned sensors is available. For the cost of individual sensors, please contact us for pricing.



Anemometers are wind-tunnel tested in our California factory.

|               |   | Vantage Vue | Vantage Pro2 | USA Units                           |                   |            | Metric Units                                    | Except for rainfall, all v<br>measured in US units or<br>rounded to the nearest<br>shown in the Resolution | f measure and<br>metric unit<br>n column. |
|---------------|---|-------------|--------------|-------------------------------------|-------------------|------------|---|--|---|
| Fun           | ction   | Va          | Va           | RESOLUTION                          | RANGE             | ACCURACY ± | RESOLUTION*                                     | RANGE  | ACCURACY ±                                |
| AL            | Evapotranspiration  |             | •            | 0.01"                               | 0 to 199.99"      | 5%         | 0,1 mm  | 0 to 1999,9 mm   | 5%  |
| AGRICULTURAL  | Growing Degree-Days   |             | 0            | 0.1 Degree-Day                      | Unlimited         |            | 0,1 Degree-Day                                  | Unlimited  |   |
| CUL:          | Cooling/Heating Degree-Days   | ~           | 0            | 0.1 Degree-Day                      | Unlimited         |            | 0,1 Degree-Day                                  | Unlimited  |   |
| GRIC          | 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:<br>-999' to +15,000';<br>-600 to +4570 m) | ~           | ~            | 0.01" Hg                            | 16" to 32.5" Hg   | 0.03" Hg   | 0,1 mm Hg<br>0,1 mb                             | 410 to 820 mm Hg<br>540 to 1100 mb<br>or hPa   | 0,8 mm Hg<br>1,0 mb or hPa                |
| BARO          | Three-Hour Trend  | ~           | ~            | Slow ≥ 0.02" Hg<br>Rapid ≥ 0.06" Hg | 5-Position Arrow  |            | Slow ≥ 0,5 mm (0,7 mb)<br>Rapid ≥ 1,5 mm (2 mb) | 5-Position Arrow   |   |
|               | Inside Humidity   | ~           | ~            | 1%                                  | 1% to 100%        | 3%         | 1%  | 1% to 100%   | 3%  |
|               | Outside Humidity Sensor Suite   | ~           | ~            | 1%                                  | 1% to 100%        | 2%         | 1%  | 1% to 100%   | 2%  |
| Σ             | Outside Humidity (T/H Sensors)  |             |              | 1%                                  | 1% to 100%        | 2%         | 1%  | 1% to 100%   | 2%  |
| ниміріту      | Outside Humidity (VP2 T/H Stations)   |             |              | 1%                                  | 1% to 100%        | 2%         | 1%  | 1% to 100%   | 2%  |
| Ē             | 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 Vue   | ~           |              | 1°F                                 | –105° to +130°F   | 3°F        | 1℃  | –76° to +54°C  | 1,5℃                                      |
|               | Outside Dew Point VP2 Sensor Suite  |             | ~            | 1°F                                 | –105° to +130°F   | 2°F        | 1°C   | –76° to +54°C  | 1°C                                       |
| H             | Rainfall  | ~           | V            | 0.01"                               | 0 to 199.99"      | 4%         | 0,2 mm  | 0 to 6553 mm   | 4%  |
| RAINFALL      |   |             | ~            |                                     | 0 to 96"/hr       |            |   | 0 to 2438 mm/hr  | <b>5% ≤ 127</b>                           |
| RAI           | Rate of Rainfall  | ~           |              | 0.01"/hr                            | 0 to 40"/hr       | 5% ≤ 5"/hr | 0,1 mm/hr                                       | 0 to 1016 mm/hr  | mm/hr                                     |
| 3             | Solar Radiation   |             | •            | 1 W/m2                              | 0 to 1800 W/m2    | 5%         | 1 W/m2  | 0 to 1800 W/m2   | 5%  |
| ార            | Solar Energy  |             | 0            | 0.1 Ly                              | 1999.9 Ly         | 5%         | 0,1 Ly  | 1999,9 Ly  | 5%  |
| SOLAR         | UV Dose   |             | •            | 0.1 MEDs                            | 0 to 199 MEDs     | 5%         | 0,1 MEDs  | 0 to 199 MEDs  | 5%  |
| sol           | UV Index  |             | •            | 0.1                                 | 0 to 16           | 5%         | 0,1   | 0 to 16  | 5%  |
|               | Inside Temperature  | ~           | V            | 0.1°F                               | +32° to +140°F    | 1°F        | 0,1°C   | 0° to +60°C  | 0,5°C                                     |
|               | Outside Temperature Sensor Suite  | ~           | V            | 0.1°F                               | –40° to +150°F    | 0.5°F      | 0,1°C   | –40° to +65°C  | 0,3°C                                     |
|               | Outside Temp (T/H Sensors)  |             | V            | 0.1°F                               | –40° to +150°F    | 0.5°F      | 0,1°C   | –40° to +65°C  | 0,3°C                                     |
|               | Outside Temp (VP2 Temp or T/H Stations)   |             | •            | 0.1°F                               | –40° to +150°F    | 0.5°F      | 0,1°C   | –40° to +65°C  | 0,3°C                                     |
|               | Soil or Water Temp (Temp Station)   |             | •            | 1°F                                 | –40° to +150°F    | 1°F        | 1°C   | –40° to +65°C  | 1℃  |
| R             | 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℃                                      |
| ATU           | Outside Heat Index Vue  | V           | -            | 1°F                                 | –40° to +165°F    | 3°F        | 1°C   | –40° to +74°C  | 1,5°C                                     |
| ER            | Outside Heat Index VP2 Sensor Suite   |             | V            | 1°F                                 | –40° to +165°F    | 2°F        | 1°C   | –40° to +74°C  | 1℃  |
| TEMPERATURE   | Temp/Hum/Wind Index Vue   | 0           |              | 0.1°F                               | -110° to +165°F   | 4°F        | 0,1°C   | -79° to +74°C  | 2°C                                       |
| F             | Temp/Hum/Wind Index VP2 Sensor Suite  |             | 0            | 0.1°F                               | –110° to +165°F   | 3°F        | 0,1°C   | –79° to +74°C  | 1,5°C                                     |
|               | Temp/Hum/Solar/Wind Index VP2 Sensor Suite                                      |             |              | 1°F                                 | –90° to +165°F    | 4°F        | 1°C   | -68° to +74°C  | 2°C                                       |
|               | Wind Chill Vue  | ~           |              | 1°F                                 | -110° to +135°F   | 2°F        | 1°C   | -79° to +57°C  | 1°C                                       |
|               | Wind Chill Sensor Suite on VP2  |             | ~            | 1°F                                 | –110° to +135°F   | 2°F        | 1°C   | –79° to +57°C  | 1℃  |
|               | Wet-bulb  |             |              | 1°F                                 | -40° to +150°F    | 2°F        | 1°C   | -40° to +65°C  | 1°C                                       |
| _             | Time  | ~           | ~            | 1 minute                            | 12/24 hours       | 8 sec/mo   | 1 minute  | 12/24 hours  | 8 sec/mo                                  |
| TIME/<br>DATE | Date  | V           | V            | month/day                           | Leap Year         | 8 sec/mo   | day/month                                       | Leap Year  | 8 sec/mo                                  |
| FO            | Sunrise & Sunset  | ~           | ~            | 1 minute                            | 12 hours          | 1 minute   | 1 minute  | 24 hours   | 1 minute                                  |
|               | Wind Direction  | ~           | V            | 1°                                  | 0° to 360°        | 3°         | 1°  | 0° to 360°   | 3°  |
|               | Compass Rose  | ~           | ~            | 22.5°                               | 16 compass points |            | 22,5°   | 16 compass points  |   |
|               |   | -           |              | 1 mph                               | 1 to 200 mph      | E9/        | 0,1 m/s   | 1 to 80 m/s  | E9/                                       |
| MIND          | Wind Speed  | ~           | ~            | 1 knot                              | 1 to 174 knots    | 5%         | 1 km/hr   | 1 to 320 km/hr   | 5%  |
|               | Direction of High Speed   | ~           | ~            | 22.5°                               | 16 compass points |            | 22,5°   | 16 compass points  |   |
|               | Wind Run  | 0           | 0            | 0.01 miles<br>0.01 nautical miles   | Unlimited         | 5%         | 0,01 kilometers                                 | Unlimited  | 5%  |

✓ Included
 Optional sensor required, but shown on console
 ○ Optional and requires WeatherLink. Solar Energy requires Solar Radiation sensor.

\*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 US units of measure, which are then converted to metric units for display purposes.

For complete specifications, visit www.davisinstruments.com/resources/ weather-monitoring/#support then click on Specification Sheets.

ess Sensor Transmitte

**Moisture/Temp Station** 

Sensor Transmitter

WIRELESS TRANSMITTERS

Solar Radiation Ser

Suite with Shield

Fan-Aspirated Rad Shield Suite with Fan-Aspirated

Suite

<sup>-</sup>an-Aspirated Rad Shield Fan-Aspirated

Suite

Suite with

Moisture/Temp Station w/o

# Which sensors can you use with your transmitter?

See pages 41 for the maximum number of transmitters that can report to a single Vantage Pro2/Vue console, WeatherLink Live, Weather Envoy or Vantage Connect.

| • |  |
|---|--|
| • |  |
|   |  |

Ontional

Included

| 4           | Optional     Maximum sensors for that transmitter                       |                |                                      |                              | 6153 Vantage Pro2 w<br>6323 Vantage Pro2 S | 6162 Vantage Pro2 P<br>6327 Vantage Pro2 P | Vantage Pro2 Plu<br>Vantage Pro2 Plu | GroWeather Sei<br>and Passive Ra | Leaf Wetness & | 6345CS Complete So | Solar-Powered | AC Powered W | EnviroMonitor |
|-------------|---|----------------|--------------------------------------|------------------------------|--|--|--------------------------------------|----------------------------------|----------------|--------------------|---------------|--------------|---------------|
|             |   | Product<br>No. | 6250 Vantage Vue<br>6357 Vantage Vue | 6152 Vantage<br>6322 Vantage | 6153 \<br>6323 \                           | 6162 \<br>6327 \                           | 6163 V<br>6328 V                     | 6820 (<br>a                      | 6345 L         | 6345C              | 6332 S        | 6331 /       | 6810 E        |
| 1           | ntegrated Rain Collector  |                | •                                    | •                            | •  | •  | •                                    | •                                |                |                    |               |              |               |
| F           | Rain Collector  | 7852           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            |               |
| 1           | ntegrated Anemometer  |                | •                                    |                              |  |  |                                      |                                  |                |                    |               |              |               |
| C           | Detachable Anemometer   | 6410           |                                      | •                            | •  | •  | •                                    | •                                |                |                    | •             | •            | •             |
| 1           | ntegrated Temperature/Humidity  |                | •                                    | •                            | •  | •  | •                                    | •                                |                |                    |               |              |               |
|             | Stainless Steel Temperature Probe with 2-Wire Termination               | 6470           |                                      |                              |  |  |                                      |                                  | 4              | 4                  |               |              | •             |
| Accessories | emperature Probe with RJ Connector*                                     | 6477           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            | •             |
| ess         | Stainless Steel Temperature Probe with RJ Connector*                    | 6475           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            | •             |
|             | emperature/Humidity Sensor with Radiation Shield                        | 6830           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            | •             |
| and         | Temperature/Humidity Sensor with 24-Hour Fan-Aspirated Radiation Shield | 6832           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            | •             |
| SUC 1       | emperature/Humidity Sensor  | 6834           |                                      |                              |  |  |                                      |                                  |                |                    | •             | •            | •             |
| Options     | Passive Radiation Shield  | 7714           | •                                    | •                            |  | •  |                                      | •                                | •              | •                  | •             | •            | •             |
|             | Daytime Fan-Aspirated Radiation Shield                                  | 7747           |                                      | •                            |  | •  |                                      | •                                |                |                    |               |              |               |
| Sensor      | 24-Hour Fan-Aspirated Radiation Shield                                  |                |                                      |                              | •  |  | •                                    |                                  |                |                    |               |              |               |
|             | Solar Radiation Sensor  | 6450           |                                      |                              | •  | •  | •                                    | •                                |                |                    | •             | •            | •             |
| U           | JV Radiation Sensor   | 6490           |                                      |                              |  | •  | •                                    | •                                |                |                    | •             | •            |               |
| 5           | Sensor Mounting Shelf for UV/Solar                                      | 6673           |                                      |                              | •  | •  | •                                    | •                                |                |                    |               |              | •             |
| L           | eaf Wetness Sensor  | 6420           |                                      |                              |  |  |                                      |                                  | 2              | 2                  |               |              | •             |
| 9           | Soil Moisture Sensor  | 6440           |                                      |                              |  |  |                                      |                                  | 4              | 4                  |               |              | •             |
| 1           | hird-party sensors  |                |                                      |                              |  |  |                                      |                                  |                |                    |               |              | •             |

\*Can also be used with Weather Envoy and Vantage Connect to replace the internal temperature sensor.

| Current D                       | C        | urrent | Draw in N | lilliamperes | Estimated Backup Battery Life in Days* |                |          |               |  |  |
|---------------------------------|----------|--------|-----------|--------------|--|----------------|----------|---------------|--|--|
| & Battery Life*                 |          | Lights | Lights    | With         | Data Logger                            | Without        | With     | Data Logger   |  |  |
|                                 |          | Off    | Ön        | USB/SER†     | WeatherLinkIP                          | Data<br>Logger | USB/SER† | WeatherLinkIP |  |  |
| Vantage Vue<br>Console/Receiver |          | 1      | 160       | 1            | 101                                    | 9 months       | 9 months | 2 days        |  |  |
| Manhama Dura 2                  | Wireless | 1      | 160       | 1            | 101                                    | 9 months       | 9 months | 2 days        |  |  |
| Vantage Pro2                    | Cabled   | 10     | 170       | 10           | 110                                    | 27 days        | 27 days  | 2 days        |  |  |
| Masthan Francis                 | Wireless | 1      | N/A       | 1            | 101                                    | N/A            | 4 months | <1 day        |  |  |
| Weather Envoy                   | Cabled   | 10     | N/A       | 10           | 110                                    | N/A            | 10 days  | <1 day        |  |  |
| WeatherLink Live                | Wireless |        |           | 100          |  | Up to 6 days   |          |               |  |  |

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

†6510USB USB Data Logger, 6510SER Serial Data Dogger



# Which with y



Options

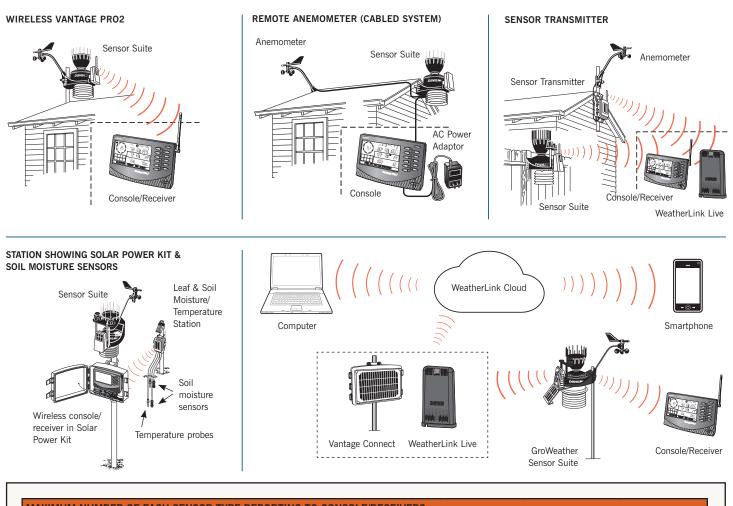
Wireless

**Cabled Options** 

Installation Options

| lhigh transmittare agn you up  | SYSTEMS & RECEIVERS |                  |              |  |                   |  |                             |                            |                          |                           |                  |                   |                      |                                       |
|--|---------------------|------------------|--------------|--|-------------------|--|-----------------------------|----------------------------|--------------------------|---------------------------|------------------|-------------------|----------------------|---------------------------------------|
| hich transmitters can you us   | e                   | WIRELESS CABLED  |              |  |                   |  |                             |                            |                          |                           |                  | LED               |                      |                                       |
| e pages 41 for the maximum number of transmitters<br>t can report to a single Vantage Pro2/Vue console,<br>atherLink Live, Weather Envoy or Vantage Connect. |                     | age Vue          | Vantage Pro2 | Vantage Pro2 with Fan-Aspirated Rad Shield | Vantage Pro2 Plus | 63 Vantage Pro2 Plus with Fan-Aspirated Rad Shield | 6316 Wireless Weather Envoy | 21 or 6622 Vantage Connect | Vantage Vue Console only | Vantage Pro2 Console only | 52C Vantage Pro2 | Vantage Pro2 Plus | Cabled Weather Envoy | 6621C or 6622C Cabled Vantage Connect |
|  | Product<br>No.      | 6250 Vantage Vue | 6152 Vani    | 6153 Vani                                  | 6162 Vani         | 6163 Vant  | 6316 Wire                   | 6620, 6621                 | 6351 Van                 | 6312 Vani                 | 6152C Va         | 6162C V           | 6316C Ca             | 6620C, 6(                             |
| Vantage Vue Console  | 6351                | 7                | •            | •  | •                 | •  | •                           |                            | •                        | •                         |                  |                   |                      |                                       |
| Vantage Vue Sensor Suite   | 6357                | •                |              |  |                   |  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless Vantage Pro2 Console  | 6312                | •                | 7            | 7  | 7.                | 7  | 7                           |                            | •                        | •                         |                  |                   |                      |                                       |
| Wireless Vantage Pro2 Sensor Suite   | 6322                |                  | •            |  |                   |  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless Vantage Pro2 Sensor Suite with 24-Hour Radiation Shield   | 6323                |                  |              | •  |                   |  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless Vantage Pro2 Sensor Suite with UV-Solar   | 6327                |                  |              |  | •                 |  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless Vantage Pro2 Sensor Suite with 24-Hour Radiation Shield & UV Solar  | 6328                |                  |              |  |                   | •  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless GroWeather Sensor Suite with Solar Radiation Sensor   | 6820                |                  |              |  |                   |  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Wireless WeatherLink Live  | 6100                | •                | •            | •  | •                 | •  | •                           |                            | •                        | •                         |                  |                   |                      |                                       |
| Wireless Weather Envoy   | 6316                | •                | •            | •  | •                 | •  | •                           |                            | •                        | •                         |                  |                   |                      |                                       |
| Wireless Leaf & Soil Moisture/Temperature Stations   | 6345                |                  | •            | •  | •                 | •  | •                           | •                          |                          | •                         |                  |                   |                      |                                       |
| Complete Soil Moisture/Temperature Station   | 6345CS              |                  | •            | •  | •                 | •  | •                           | •                          |                          |                           |                  |                   |                      |                                       |
| Wireless Temperature Station   | 6372                |                  | •            | •  | •                 | •  | •                           | •                          |                          | •                         |                  |                   |                      |                                       |
| Wireless Temperature/Humidity Station  | 6382                |                  | •            | •  | •                 | •  | •                           | •                          |                          | •                         |                  |                   |                      |                                       |
| Solar-Powered Wireless Sensor Transmitter  | 6332                |                  | •*           | •*   | •*                | •*   | •*                          |                            | •                        |                           |                  |                   |                      |                                       |
| AC Powered Wireless Sensor Transmitter   | 6331                |                  | •*           | •*   | •*                | •*   | •*                          | •                          | •                        | •                         |                  |                   |                      |                                       |
| Standard Wireless Repeater, AC-Powered   | 7626                | •                | •            | •  | •                 | •  | •                           | •                          | •                        | •                         |                  |                   |                      |                                       |
| Standard Wireless Repeater, Solar-powered  | 7627                | •                | •            | •  | •                 | •  | •                           | •                          | ٠                        | •                         |                  |                   |                      |                                       |
| Long-Range Wireless Repeater, Solar-Powered  | 7654                | •                | •            | •  | •                 | •  | •                           | ٠                          | ٠                        | •                         |                  |                   |                      |                                       |
| Solar Power Kit for Wireless (includes 1.4 amp hour 6-volt battery)  | 6614                | •                | •            | •  | •                 | •  | •                           |                            | ٠                        | •                         |                  |                   |                      |                                       |
| Cabled Vantage Pro2 Console  | 6312C               |                  |              |  |                   |  |                             |                            |                          |                           | •                | •                 |                      |                                       |
| Cabled Weather Envoy   | 6316C               |                  |              |  |                   |  |                             |                            |                          |                           |                  |                   | •                    |                                       |
| Cabled Vantage Pro2 Sensor Suite   | 6322C               |                  |              |  |                   |  |                             |                            |                          |                           | •                |                   | •                    | •                                     |
| Cabled Vantage Pro2 Sensor Suite with UV & Solar   | 6327C               |                  |              |  |                   |  |                             |                            |                          |                           |                  | •                 | •                    | •                                     |
| Cabled GroWeather Sensor Suite with Solar Radiation Sensor   | 6820C               |                  |              |  |                   |  |                             |                            |                          |                           |                  |                   | •                    | •                                     |
| Heavy Duty Solar Power Kit (includes 12 amp hour 6-volt battery) **  | 6612                | •                | •            | •  | •                 | •  | •                           |                            | •                        | •                         | •                | •                 | •                    | •                                     |
| Rain Collector Heater (compatible with straight-sided rain cone)   | 7720                |                  | •            | •  | •                 | •  |                             |                            |                          |                           | •                | •                 |                      |                                       |
| Mounting Tripod  | 7716                | •                | •            | •  | •                 | •  |                             | •                          |                          |                           | •                | •                 |                      | •                                     |
| Mounting Pole Kit  | 7717                | •                | •            | •  | •                 | •  |                             | •                          |                          |                           | •                | •                 |                      | •                                     |
| Extra Solar Panel Kit ***  | 6616                |                  |              |  |                   |  |                             | •                          |                          |                           |                  |                   |                      | ٠                                     |
| Universal Shelter  | 6618                | •                | •            | •  | •                 | •  | •                           |                            | •                        | •                         | •                | •                 | •                    | •                                     |
| Daytime Fan-Aspirated Radiation Shield   | 7747                |                  | •            |  | •                 |  |                             |                            |                          |                           | •                | •                 |                      |                                       |
| Sensor Mounting Shelf  | 6673                |                  | •            |  | •                 | •  |                             |                            |                          |                           | •                |                   |                      |                                       |

\* Only when used as a separate transmitter for your station's anemometer. \*\* Can also be used on wireless stations when more power is needed. \*\*\* Can be paired with 6612 and 6614.



| MAXIMUM NUMBER OF EACH SENSOR TYPE REPORTING TO CONSOLE/RECEIVERS |                  |        |        |       |        |               |                 |               |  |
|---|------------------|--------|--------|-------|--------|---------------|-----------------|---------------|--|
| Concer Trees  | WeatherLink Live | Vantag | e Pro2 | Vanta | ge Vue | Weather Envoy | Vantage Connect | EnviroMonitor |  |
| Sensor Type   | Logged           | Shown  | Logged | Shown | Logged | Logged        | Logged          | Logged        |  |
| Anemometer  | 8                | 1      | 1      | 1 *   | 1 *    | 1             | 1               | 80+           |  |
| Temperature Probe   | 32               | 8      | 3      | 1 *   | 1 *    | 3             | 3               | 80+           |  |
| Temperature/Humidity  | 8                | 8      | 4/3    | 1/1 * | 1/1 *  | 4/3           | 4/3             | 80+           |  |
| Rain  | 8                | 1      | 1      | 1 *   | 1 *    | 1             | 1               | 80+           |  |
| UV  | 8                | 1      | 1      | 0     | 0      | 1             | 1               | 80+           |  |
| Solar Radiation   | 8                | 1      | 1      | 0     | 0      | 1             | 1               | 80+           |  |
| Leaf Wetness  | 16               | 2 **   | 2 **   | 0     | 0      | 2 **          | 2 **            | 80+           |  |
| Soil Moisture   | 32               | 4 **   | 4 **   | 0     | 0      | 4 **          | 4 **            | 80+           |  |
| Third-Party Sensors   | 0                | 0      | 0      | 0     | 0      | 0             | 0               | 80+ ***       |  |

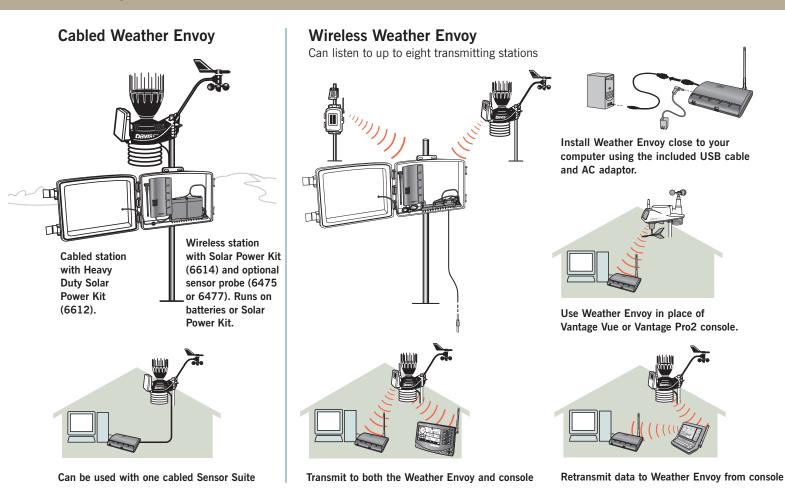


Each WeatherLink Live, Vantage Pro2, Weather Envoy and Vantage Connect console can receive data from up to eight different transmitting stations.

"Shown" = Live current conditions seen on the LCD display or WeatherLink

"Logged" = Stored historical archive records from Weatherlink database

- \* One Sensor Suite or transmitter only.
- \*\* Only if one transmitter has Leaf Wetness only and one has Soil Moisture (Temperature probes allowed on both).
- \*\*\*See page 24 or go to www.davisinstruments.com/em-sensors for supported sensors.



|   | EXTENSION CABLES  |                          |                         |  |  |  |
|---|---|--------------------------|-------------------------|--|--|--|
| Our Standard 4-Conductor Extension Cables include a cou               | 7876-008 8' (2,4 m)   |                          |                         |  |  |  |
| waterproof, silicone-filled, crimp-style splice connectors) for       |   | 7876-040 40' (12 m)      |                         |  |  |  |
| chart below to determine maximum cable lengths.                       | 7876-100 100' (30 m)  |                          |                         |  |  |  |
| chart below to determine maximum cable lengths.                       |   | 7876-200 200' (61 m)     |                         |  |  |  |
| Product   | Cable Use   | Included<br>Cable Length | Maximum<br>Cable Length |  |  |  |
| Wireless Vantage Pro2   | Anemometer to Sensor Suite                                  | 40' (12 m)               | 240' (73 m)*            |  |  |  |
| Cabled Venters Drog   | Anemometer to Sensor Suite                                  | 40' (12 m)               | 240' (73 m)*            |  |  |  |
| Cabled Vantage Pro2   | Console to Sensor Suite                                     | 100' (30 m)              | 1000' (300 m)           |  |  |  |
| Cabled Vantage Pro2 Sensor Suite with Cabled Vantage Connect          | Vantage Connect to Sensor Suite                             | 100' (30 m)              | 1000' (300 m)           |  |  |  |
| WeatherLink for Vantage Pro2 and Vantage Vue (serial port versions)** | Data Logger to Serial Port                                  | 8' (2,4 m)               | 48' (14,6 m)            |  |  |  |
| Solar Radiation Sensor (6450)   | Sensor to Sensor Suite                                      | 2' (0,6 m)               | 125' (38 m)             |  |  |  |
| UV Sensor (6490)  | Sensor to Sensor Suite                                      | 2' (0,6 m)               | 125' (38 m)             |  |  |  |
| Stainless Steel Temperature Probe with RJ Connector (6475)            | Probe to Wireless Temperature Station, Weather Envoy or     | 25' (7,6 m)              | 200' (61 m)             |  |  |  |
| Temperature Probe with RJ Connector (6477)                            | Sensor Transmitter  | 25 (7,0 11)              |                         |  |  |  |
| Leaf Wetness Sensor (6420)  | Sensor to Wireless Leaf & Soil Moisture/Temperature Station | 40' (12 m)               | 200' (61 m)             |  |  |  |
| Anemometer (6410)   | Sensor to Sensor Suite or Sensor Transmitter                | 40' (12 m)               | 240' (73 m)*            |  |  |  |
| Rain Collector (standalone, 7852)                                     | Collector to Sensor Suite or Sensor Transmitter             | 40' (12 m)               | 900' (270 m)            |  |  |  |
| Rain Collector with Mountable Base (7857)                             | Collector to Sensor Suite or Sensor Transmitter             | 40' (12 m)               | 900' (270 m)            |  |  |  |
| Temperature/Humidity Sensor (6830) (6832)                             | Sensor to Sensor Transmitter                                | 25' (7,6 m)              | 25' (7,6 m)             |  |  |  |

\* Anemometer Cables: Maximum displayable wind speed decreases as the length of cable increases. At 140' (42 m) of cable, the maximum wind speed displayed is 135 mph (60 m/s). At 240' (73 m) of cable, the maximum wind speed displayed is 100 mph (45 m/s).

\*\* WeatherLink USB: Extension cables may be purchased from a computer supplier.

To extend the cables on the Temperature Probe (6470), Soil Moisture Sensor (6440), and Rain Collector Heater (7720), please call us directly.

# Things to consider when purchasing a weather station

# 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, rainfall amounts, and dates 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.

# How often is the data updated?

Davis Sensor Suites transmit a data packet every 2.5 seconds. Highly variable conditions like wind speed and direction are updated with every packet, while less variable conditions are updated every 10 to 50 seconds.

# How accurate is the data?

Davis stations generally beat their similarly-priced competition in accuracy, resolution, and range. We proudly post our specs on our website.

### How do you access the data?

Davis stations let you access, analyze, and store your data on the console, your computer, the internet, or on your smartphone.

### • On the console

You'll see much more than just current conditions on your console. You'll get highs and lows (and/or totals or averages) for just about all weather conditions, with time and date, for the last 24 (Vantage Pro2) or 25 (Vantage Vue) days, months, or years. You'll see the data numerically and 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. With the graphs and the Weather Center on Vantage Vue, you can do tons of analysis right there on your console.

 On your computer, the WeatherLink Cloud or vour smartphone

With the Davis WeatherLink family, and one of our choices of data-collection devices, you can choose to upload your data to the WeatherLink Cloud. You can access and analyze it 24/7 on WeatherLink.com or your smartphone with the WeatherLink Mobile app.

### How durable is the station?

There are many, many thousands of Davis stations out in the elements all over the world. Davis stations have endured ice storms and hurricanes. They have transmitted data for years through snow, rain, and ice. They are installed in deserts and at the seashore. They are built to function at high elevations up to 15,000 feet (4570 meters), and to remain robust no matter what conditions they are subjected to. We warranty our stations and offer repair services. We are very proud to say that you can expect your station provide you with weather data for many years.

# How long has the company been in business?

Established in 1963, Davis Instruments opened up the personal weather station market in 1989. Our weather stations are assembled and tested right here in Hayward, California, where we have a full staff giving the best customer services and support in the business.

# Limited Warrantv

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-Dav 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.

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# **Make Every Acre Count**

EnviroMonitor is a simple system that allows you to measure and manage key elements you need to keep crops healthy, save money, and improve yields.



