## Add special-purpose stations or sensors.

Build your own customized weather station by adding one or more options or special-purpose stations. Each wireless Vantage Pro2 console/receiver can receive data from up to eight different transmitting stations. Start with one of our wireless Vantage Pro2 or Vantage Pro2 Plus stations (which include both the console and the integrated sensor suite), and add up to seven Temperature or Temperature/Humidity Stations. Or buy the Vantage Pro2 console alone (without the integrated sensor suite), and add up to eight special-purpose stations of your choice. See the chart on page 21 for maximum number of each station type.





#### **Leaf & Soil Moisture/Temperature Station**

Solar-powered station includes transmitter and backup battery inside weather-resistant shelter. To view the data, add a wireless Vantage Pro2 console/receiver, or Weather Envoy and WeatherLink. Each can receive data from either:

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

www.davisnet.com/links. sensors and four temperature probes. Available in two models. Choose the model without sensors, and add only those you need to meet your requirements. Or choose the Complete Soil Moisture/Temperature Station, and add

6345 Wireless Leaf & Soil Moisture/Temperature Station without sensors \$195

6345CS Complete Soil Moisture/Temperature Station with 4 soil moisture sensors and 4 temperature probes \$545

**NIST** 

For teachers participating in the

GLOBE program, see the special protocol developed for the 6345CS at www.

globe.gov, or visit our website at

#### **Leaf Wetness Sensor**

one or two leaf wetness sensors as desired.

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

6420 Leaf Wetness Sensor \$85

#### Soil Moisture Sensor

Watermark® soil moisture sensor uses electrical resistance to measure the moisture level of the soil. Does not require periodic maintenance during the growing season. Simply bury at the desired depth, then monitor moisture levels throughout the season. Add up to four sensors to a single

Leaf & Soil Moisture/Temperature Station. Includes 15' (4.6 m) cable.

🔈 6440 Soil Moisture Sensor \$50

#### **Stainless Steel Temperature Probe**

Multi-purpose temperature probe with 2½" (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. **NIST** Includes 15' (4.6 m) direct-burial cable.

6470 Stainless Steel Temperature Probe \$40



### **Temperature/Humidity Station**

Battery-powered station includes temperature and humidity sensors inside protective radiation shield, and transmitter and lithium battery inside weather-resistant shelter. Expected battery life is six to nine months. To view the data, add a wireless Vantage Pro2 console/receiver or Weather Envoy and WeatherLink, Includes hardware for mounting on fence post or pole. Mounting pole is not included.

6382 Wireless Temperature/Humidity Station \$235



#### Wireless **Temperature Station**

Battery-powered station includes stainless steel temperature probe with 12' (3.6 m) cable, transmitter and battery inside weather-resistant shelter, and mounting hardware. To view the data, add a wireless Vantage Pro2 console/receiver, or Weather Envoy and WeatherLink. Expected battery life is six to nine months.

6372 Wireless Temperature Station \$175

**NIST** 



#### **Anemometer Transmitter Kit**

Solar-powered kit for use with wireless Vantage Pro2 or Pro2 Plus. Allows you to mount the anemometer in a different location than the rain collector and the rest of the integrated sensor suite, up to 1000' (300 m) from the console/receiver. For longer distances, add one or more wireless repeaters. Kit includes transmitter inside weather-resistant shelter, solar panel, battery, and mounting hardware.

6332 Anemometer Transmitter Kit \$160

#### **Solar Radiation Sensor**

To measure solar radiation and solar energy. Diffuser element and housing are carefully designed for accurate cosine response. Silicon photo diode provides good match to solar spectrum. Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust. To mount next to a rain collector, add our Sensor Mounting Shelf (not included).

#### 6450 Solar Radiation Sensor \$160

Includes 4' (1.2 m) cable. (When sold pre-installed on a Vantage Pro2 Plus, includes 3' (0.9 m) cable.) Use Standard 4-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to integrated sensor suite.

7876-008 Cable, 8' (2.4 m) \$10

7876-040 Cable, 40' (12 m) \$18

7876-100 Cable, 100' (30 m) \$40

#### **UV Sensor**

Measures the sunburning portion of the UV spectrum. Allows you to display UV index, dose rate, and daily and accumulated dose. Multi-layer filter provides a spectral response that closely matches the Erythema Action Spectrum. Diffuser provides excellent cosine response.



Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust. To mount next to a rain collector, add our Sensor Mounting Shelf (not included).

#### 6490 UV Sensor \$350

Includes 4' (1.2 m) cable. (When sold pre-installed on a Vantage Pro2 Plus, includes 3' (0.9 m) cable.) Use Standard 4-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to integrated sensor suite.

7876-008 Cable, 8' (2.4 m) \$10

7876-040 Cable, 40' (12 m) \$18

7876-100 Cable, 100' (30 m) \$40



#### **Daytime Fan-Aspirated Radiation Shield Kit**

An economical solution for adding the benefits of fan aspiration to your wireless or cabled Vantage Pro2 or Pro2 Plus. Half the cost of our 24-hour fan-aspirated radiation shield, but nearly 75% as effective in reducing the effects of daytime radiation. Solar-powered fan runs during the day. Since there is no backup battery, the fan will cease running when night falls and the effects of radiation are less. Kit includes fan, solar panel, additional radiation shield plates, and hardware, as shown in inset photo. Larger photo shows the kit as installed on a wireless Vantage Pro2. Note that this kit is not compatible with our original Vantage Pro stations.

7747 Daytime Fan-Aspirated Radiation Shield Kit \$100

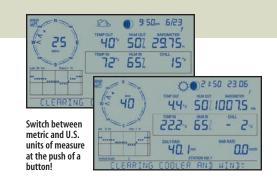


#### **Sensor Mounting Shelf**

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

6673 Sensor Mounting Shelf \$25

# Add another console, and get the weather report wherever you are—indoors or out.



#### Vantage Pro2 Console/Receiver

To view data from a wireless Vantage Pro2 station in additional locations, or for use with any of the special-purpose wireless stations shown on

the previous pages. Receive data directly from the outdoor sensors or use as a repeater, retransmitting the data from one console/ receiver to another. Includes all the features shown on pages 2-3.

6312 Vantage Pro2 Console/Receiver \$295





Or mount it on a wall.

# Customize your installation.



#### 40' (12 m) Anemometer Cable

All Vantage Pro2 stations, whether wireless or cabled, include a cable that lets you mount the anemometer and rain collector up to 40' (12 m) apart. When the cable is not needed, simply lash the coil out of the way on your mounting pole. Hardware for mounting on a pole or post is included; mounting pole is not. Extend the cable up to 540' (165 m) for a wireless station or 1000' (300 m) for a cabled station using optional extension cables. See page 20.



#### **Mounting Pole Kit**

Optional Mounting Pole Kit includes two galvanized steel poles, connector, and mounting hardware. Poles measure  $19\frac{1}{2}$ " (0.50 m) and 21" (0.53 m) long. Assemble the two together to make a single  $37\frac{1}{2}$ " (0.95 m) long pole. Outside diameter is  $1\frac{5}{16}$ " (33 mm).

7717 Mounting Pole Kit \$30



#### **Mounting Tripod**

Optional tripod makes installation even easier. Brackets at the base of legs tilt to mount on roof or uneven terrain. Made of galvanized steel. Includes two 36<sup>3</sup>/<sub>8</sub>" (0.92 m)-long poles, which may be used separately or together to make a single 69<sup>3</sup>/<sub>4</sub>" (1.77 m)-long pole.

7716 Mounting Tripod \$65

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

NEW!

For longer distances or to improve reception in troublesome areas, add one or more wireless repeaters. Use up to four repeaters in a daisy chain, retransmitting from a single Vantage Pro2 integrated sensor suite or special-purpose station. Or build a network of up to four repeaters and eight wireless stations, with some repeaters listening to multiple stations, each with their own unique ID. See the chart on page 21 for the maximum number of each station type. For use with a wireless Vantage Pro2 console/receiver or Weather Envoy with a firmware date of May 2005 or later. To use a repeater with one of these stations manufactured before that date, update the firmware using our Vantage Pro2 Updater.



Antennas for Long-Range Repeaters

For use with our long-range repeaters. Each repeater requires two antennas: one to receive the 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 or match to suit your needs; use the chart to determine the distance you'll be able to achieve depending on the antennas used.

7656 Omni Antenna \$150 7660 Yagi Antenna \$125



## Long-Range Wireless Repeaters

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

7653 Long-Range Repeater, AC-Powered \$200 7654 Long-Range Repeater, Solar-Powered \$250

Antenna Combination	Multiplier	Maximum Transmission Distance 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
0mni – 0mni	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>\*</sup> Dipole antennas are found on all of our wireless weather stations and on our standard repeaters.

#### **Standard Wireless Repeaters**

Ideal for most applications. Uses the same dipole antenna found on all of our wireless stations. Range is up to 1000' (300 m) outdoors, line of sight. Typical range through walls under most conditions is 200' to 400' (60 to

120 m). AC-powered model includes power adapter. Solar-powered model includes solar panel and lithium backup battery.

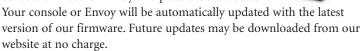
7626 Standard Wireless Repeater, AC-Powered \$150

7627 Standard Wireless Repeater, Solar-Powered \$200

#### **Vantage Pro2 Updater**

Take advantage of the latest developments with our Vantage Pro2 Updater. Simply plug it into the port on your Vantage Pro2

console or Weather Envoy and press the start button.



#### 6311VP2 Vantage Pro2 Updater \$125

Also available on loan for one-time use at a reduced cost. Contact our Customer Service or Tech Support Department for details.

Solar-Powered

<sup>\*\*\*</sup> Typical distance will be less. Outdoors, line of sight with minor obstructions or interference, typical distance is about 0.50 to 0.80 times the maximum. Through walls or in areas with high RF interference, typical distance may be as low as 0.20 to 0.40 times the maximum.