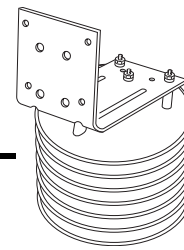


Wireless Temperature/Humidity Station

With Passive Shielding (6382)

6382



VANTAGE PRO2

The Wireless Temperature/Humidity Station measures relative humidity and air temperature. The passive solar radiation shield used in both models is made of a proprietary plastic designed for high thermal reflectance and low thermal conductivity. It can be used with any wireless Vantage Pro2™ weather station as well as all other compatible wireless stations.

The humidity sensor is a thin film capacitor element. A dielectric polymer layer absorbs water molecules from the air through a thin metal electrode, which causes a change in capacitance proportional to relative humidity. The temperature sensor is a precision thermistor that produces a resistance change proportional to temperature. The sensors are mounted next to one another in the sensor interface module (SIM) (6382) to ensure a close correlation between relative humidity and temperature readings. The relative humidity and temperature readings are used to calculate dew point.

The Wireless Temperature/Humidity Station includes temperature and humidity sensors, transmitter, and a passive solar radiation shield. Please refer to the WeatherLink for Vantage Pro Spec Sheet for optional data logging and charting capabilities available for this product.

Specifications

General

Operating Temperature	-40° to +150° F (-40° to +65° C)
Non-operating Temperature	-50° to +158° F (-45° to +70° C)
Current Draw, Sensors & Transmitter only	0.14 mA (average), 30 mA (peak) at 4 to 6 VDC
Battery: Sensors & Transmitter / Fan	CR-123 3-Volt Lithium cell / 2 - 1.2 NiCad C-cells
Battery Life	8 months without sunlight - greater than 2 years depending on solar charging
Sensor Type	
Temperature	Thermistor
Relative Humidity	Film capacitor element
Housing Material	UV-resistant PVC plastic
Dimensions	8.25" wide x 7.25" long x 7.75" high (210 mm x 184 mm x 197 mm)
Weight	3.5 lbs. (.1.6 kg)

Wireless Communications

Transmit/Receive Frequency	US Models: 902-928 MHz FHSS, Overseas Models: 868.0 - 868.6 MHz FHSS.
ID Codes Available	8
Output Power	902-928 MHz FHSS: FCC-certified low power, less than 8 mW, no license required 868.0 - 868.6 MHz FHSS: CE-certified, less than 8 mW, no license required

Range

Line of Sight	up to 1000 feet (300 m)
Through Walls	200 to 400 feet (75 to 150 m)

Sensor Output (as used by Davis Instruments weather station consoles.)

Temperature (Air)	
Resolution and Units	1°F or 1°C (user-selectable)
Range	-40° to +150° F (-40° to +65° C)
Sensor Accuracy	±1°F (±0.5°C) under 110°F (43°C), ±2°F (±1°C) over 110°F (43°C) (see chart)
Radiation Induced Error	+2°F (1°C) at solar noon (insolation = 1040 W/m ² , avg. wind speed £ 2 mph (1 m/s)) (reference: RM Young Model 43408 Fan-Aspirated Radiation Shield)
Update Interval	10 to 12 seconds (depending on DavisTalk ID code)
Data	Instant Reading (user adjustable)
Alarms	High and Low Thresholds from Instant Reading
Relative Humidity	
Range	1 to 100% RH
Accuracy	±3% (0 to 90% RH), ±4% (90 to 100% RH)
Drift	up to ±2% per year
Update Interval	50 seconds to 1 minute (depending on DavisTalk ID code)
Data	Instant (user adjustable)
Alarms	High and Low Threshold from Instant Reading

Temperature Charts

