

# 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 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) 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® and Vantage Pro2™ specification sheet for optional data logging and charting capabilities available for this product.

## 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) (from external power source)
Battery: Sensors & Transmitter . . . . .	CR-123 3-Volt Lithium cell
Battery Life . . . . .	8 months
Sensor Type:	
Temperature . . . . .	Thermistor
Relative Humidity . . . . .	Film capacitor element
Housing Material . . . . .	UV-resistant PVC plastic
Dimensions (length x width x height) . . . . .	7.50" x 8.50" x 6.00" (190 mm x 216 mm x 153 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

### 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 (depending on ID code)
Data . . . . .	Instant (user adjustable)
Alarms . . . . .	High and Low Threshold from Instant Reading

**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) typical (see chart)  
 Radiation Induced Error ..... +2°F (1°C) at solar noon (insolation = 1040 W/m2, avg. wind speed 2 mph (1 m/s)) (reference: RM Young Model 43408 Fan-Aspirated Radiation Shield)  
 Update Interval ..... 10 seconds (depending on ID code)  
 Data ..... Instant Reading (user adjustable)  
 Alarms ..... High and Low Thresholds from Instant Reading

**Temperature Chart**

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**Package Dimensions**

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Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
6382	8.75" x 7.75" x 5.25" (223 mm x 197 mm x 134 mm)	3.5 lbs. (1.6 kg)	011698 00266 5
6382OV			011698 00353 2