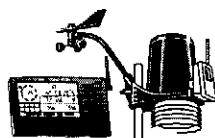# Wireless Vantage Pro2™
& Vantage Pro2™ Plus Stations

(Including Fan-Aspirated Models)

6152   6162
6153   6163

The Vantage Pro2™ (# 6152, 6153) and Vantage Pro2™ Plus (# 6162, 6163) Wireless Weather Stations include two components: the Integrated Sensor Suite (ISS) which houses and manages the external sensor array, and the console which provides the user interface, data display, A/D conversion in the ISS, and calculations. The ISS and Vantage Pro2 console communicate via an FCC-certified, license-free frequency hopping transmitter and receiver. User-selectable transmitter ID codes allow up to eight stations to coexist in the same geographic area. The frequency hopping spread spectrum technology provides greater communication strength over longer distances and areas of weaker reception. The Wireless Vantage Pro2™ Plus weather station includes two additional sensors that are optional on the Vantage Pro2: the UV Sensor and the Solar Radiation Sensor. The console may be powered by batteries or by the included AC-power adapter. The wireless ISS is solar powered with a battery backup. Use WeatherLink™ for Vantage Pro and Vantage Pro2 to let your weather station interface with a computer, to log weather data, and to upload weather information to the internet.

The 6152 and 6162 rely on passive shielding to reduce solar-radiation induced temperature errors in the outside temperature sensor readings. The Fan-aspirated 6153 and 6163 combine passive shielding with a solar-powered fan that draws outside air in over the temperature and humidity sensors, providing a much more accurate temperature reading than that available using passive shielding alone.

Integrated Sensor Suite (ISS)

Operating Temperature	-40° to +150°F (-40° to +65°C)
Storage Temperature	-50° to +158°F (-45° to +70°C)
Current Draw (ISS SIM only)	0.14 mA (average), 30 mA (peak) at 4 to 6 VDC
Solar Power Panel (ISS SIM / Fan-Aspirated)	0.5 Watts / 0.75 Watts
Battery (ISS SIM /Fan-Aspirated)	CR-123 3-Volt Lithium cell / 2 - 1.2 Volt NiCad C-cells
Battery Life (3-Volt Lithium cell)	8 months without sunlight - greater than 2 years depending on solar charging
Battery Life (NiCad C-cells)	1 year
Fan Aspiration Rate (Fan-Aspirated Only)	190 feet/min. (0.9 m/s) (full sun), 80 feet/min. (0.4 m/s) (battery only) (intake flow rate) 500 feet/min. (2.5 m/s) (full sun), 280 feet/min. (1.4 m/s) (battery only) (sensor chamber flow rate)
Connectors, Sensor	Modular RJ-11
Cable Type	4-conductor, 26 AWG
Cable Length, Anemometer	40' (12 m) (included), 240' (73 m) (maximum recommended)
Wind Speed Sensor	Large wind cups with magnetic switch
Wind Direction Sensor	Wind vane with potentiometer
Rain Collector Type	Tip bucket, 0.01" per tip (0.2 mm with metric rain adapter), 33.2 in^2 (214 cm^2) collection area
Temperature Sensor Type	Thermistor
Relative Humidity Sensor Type	Film capacitor element
Housing Material	UV-resistant PVC plastic

ISS Dimensions:

Product #	(Length x Width x Height)	Weight
6152	11.00" x 9.38" x 14.00" (279 mm x 238 mm x 355 mm)	5.7 lbs. (2.6 kg)
6162		6.1 lbs. (2.6 kg)
6153	11.00" x 9.38" x 21.00" (279 mm x 238 mm x 533 mm)	8.6 lbs. (3.9 kg)
6163		9 lbs. (4.1 kg)

Console

Console Operating Temperature	+14° to +140°F (-10° to +60°C)
Display Temperature	+32° to +140°F (0° to +60°C)
Storage Temperature	-5° to +158°F (-20° to +70°C)
Current Draw	0.90 mA average, 20 mA peak, (plus 120 mA for display lamps, plus 0.125 mA for each optional wireless transmitter received by the console) at 4 to 6 VDC
AC Power Adapter	5 VDC, 900 mA, regulated
Batteries	3 C-cells
Battery Life	up to 9 months
Connectors	Modular RJ-11
Housing Material	UV-resistant PVC plastic
Console Display Type	LCD Transflective
Dimensions (console: length x width x height; Display: length x height)	
Console with antenna	10.375" x 1.5" x 6.13" (264 mm x 38 mm x 156 mm)
Console with antenna extended up	10.375" x 1.5" x 9.8" (264 mm x 38 mm x 248 mm)
Display	5.94" x 3.375" (151 mm x 86 mm)
Weight (with batteries)	1.88 lbs. (.85 kg)

Data Displayed on Console

The data display categories represent all weather variables that the console displays and are listed in alphabetical order. General describes the general ways in which data is displayed and archived for all data display categories and is listed first as a point of reference. See the individual data display categories for specific display information.

General

Daily Data	Includes the earliest time of occurrence of highs and lows; period begins/ends at 12:00 am
Monthly Data	Period begins/ends at 12:00 am on the first of the month
Yearly Data	Period begins/ends at 12:00 am on the first of January unless otherwise noted
Current Display Data	Current display data describes the current reading for each weather variable. In most cases, the variable lists the most recently updated reading or calculation. Some current variable displays can be adjusted so there is an offset for the reading.
Current Graph Data	Current graph data appears in the right most column in the console graph and represents the latest value within the last period on the graph; totals can be set or reset. Display intervals vary. Examples include: Instant, 15-min., and Hourly Reading; Daily, Monthly, High and Low
Historical Graph Data	Includes the past 24 values listed unless otherwise noted; all can be cleared and all totals reset. Display intervals vary. Examples include: 15-min., and Hourly Reading; Daily, Monthly, High and Low
Graph Time Interval Length	1 min., 10 min., 15 min., 1 hour, 1 day, 1 month, 1 year (user-selectable, availability depends upon variable selected)
Graph Time Span	24 Intervals + current interval (see graph intervals to determine time span)
Graph Variable Span (Vertical Scale)	Automatic (varies depending upon data range); Maximum and Minimum value in range appear in ticker
Alarm Indication	Alarms sound for only 2 minutes (time alarm is always 1 minute) if operating on battery power. Alarm message is displayed in ticker as long as threshold is met or exceeded. Alarms can be silenced (but not cleared) by pressing the DONE key.
Update Interval	Varies with sensor - see individual sensor specifications

Barometric Pressure

Resolution and Units	Measured in 0.01" Hg. Other units are converted from Hg and rounded to nearest 0.1 mm, 0.1 hPa, 0.1mb.
Corrected Range	26.00" to 32.00" Hg, 660.0 to 810.0 mm Hg, 880.0 to 1080.0 hPa/mb
Uncorrected Range	16.00" to 33.50" Hg, 406.0 to 850.0 mm Hg, 542.0 to 1130.0 hPa/mb
Elevation Range	-1500' to +15,300' (-460 m to 4670 m). The console screen limits display of lower elevation to -999' when using feet as elevation unit.
Uncorrected Reading Accuracy	±0.03" Hg (±0.8 mm Hg, ±1.0 hPa/mb) (at room temperature)
Sea-Level Reduction Equation Used	United States Method employed prior to use of current "R Factor" method
Equation Source	Smithsonian Meteorological Tables
Equation Accuracy	±0.01" Hg (±0.3 mm Hg, ±0.3 hPa/mb)
Elevation Accuracy Required	±10' (3m) to meet equation accuracy specification
Overall Accuracy	±0.04" Hg (±1.0 mm Hg, ±1.4 hPa/mb)
Trend (change in 3 hours)	Change 0.06" (2 hPa/mb, 1.5 mm Hg) = Rapidly Change 0.02" (0.7hPa/mb, 0.5 mm Hg)= Slowly
Trend Indication	5 position arrow: Rising (rapidly or slowly), Steady, or Falling (rapidly or slowly)
Update Interval	15 minutes or when console BAR key is pressed twice
Current Display Data	Instant
Current Graph Data	Instant, 15-min., and Hourly Reading; Daily, Monthly, High and Low
Historical Graph Data	15-min. and Hourly Reading; Daily, Monthly Highs and Lows
Alarms	High Threshold from Current Trend for Storm Clearing (Rising Trend) Low Threshold from Current Trend for Storm Warning (Falling Trend)
Range for Rising and Falling Trend Alarms	0.01 to 0.25" Hg (0.1 to 6.4 mm Hg, 0.1 to 8.5 hPa/mb)

Clock

Resolution	1 minute
Units	Time: 12 or 24 hour format (user-selectable)
Date	US or International format (user-selectable)
Accuracy	±8 seconds/month
Adjustments	
Time:	Automatic Daylight Savings Time (for users in North America, Europe and Australia that observe it in AUTO mode, MANUAL setting available for all other areas)
Date:	Automatic Leap Year
Alarms	Once per day at set time when active

Dewpoint (calculated)

Resolution and Units	Measured in 1°F. Celsius is converted from Fahrenheit and rounded to the nearest 1°C.
Range	-105° to +130°F (-76° to +54°C)
Accuracy	±3°F (±1.5°C) (typical)
Update Interval	10 to 12 seconds
Source	World Meteorological Organization (WMO)
Equation Used	WMO Equation with respect to saturation of moist air over water
Variables Used	Instant Outside Temperature and Instant Outside Relative Humidity
Current Display Data	Instant Calculation
Current Graph Data	Instant Calculation; Daily, Monthly High and Low
Historical Graph Data	Hourly Calculations; Daily, Monthly Highs and Lows
Alarms	High and Low Threshold from Instant Calculation

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Evapotranspiration (calculated, requires Solar Radiation Sensor)

Resolution and Units	Measured in 0.01". Converted to mm and rounded to nearest 0.2 mm
Range	Daily to 99.99" (999.9 mm); Monthly & Yearly to 199.99" (1999.9 mm)
Accuracy	Greater of 0.01" (0.25 mm) or ±5%, Reference: side-by-side comparison against a CIMIS ET weather station
Update Interval	1 hour
Calculation and Source	Penman-Monteith Equation as implemented by CIMIS (California Irrigation Management Information System) including Net Radiation calculation
Current Display Data	Latest Hourly Total Calculation
Current Graph Data	Latest Hourly Total Calculation, Daily, Monthly, Yearly Total
Historical Graph Data	Hourly, Daily, Monthly, Yearly Totals
Alarm	High Threshold from Latest Daily Total Calculation

Forecast

Variables Used	Barometric Reading & Trend, Wind Speed & Direction, Rainfall, Temperature, Humidity, Latitude & Longitude, Time of Year
Update Interval	1 hour
Display Format	Icons on top center of display; detailed message in ticker at bottom
Variables Predicted	Sky Condition, Precipitation, Temperature Changes, Wind Direction and Speed

Heat Index (calculated)

solution and Units	1°F or 1°C. Celsius is converted from Fahrenheit and rounded to the nearest 1°C
Range	-40° to +135°F (-40° to +57°C)
Accuracy	±3°F (±1.5°C) (typical)
Update Interval	10 seconds
Source	United States National Weather Service (NWS)/NOAA
Formulation Used	Steadman (1979) modified by US NWS/NOAA and Davis Instruments to increase range of use
Variables Used	Instant Outside Temperature and Instant Outside Relative Humidity
Current Display Data	Instant Calculation
Current Graph Data	Instant Calculation; Daily, Monthly High
Historical Graph Data	Hourly Calculations; Daily, Monthly Highs
Alarm	High Threshold from Instant Calculation

Humidity

Inside Relative Humidity (sensor located in console)

Resolution and Units	1%
Range	0 to 100% RH
Accuracy	±5%
Update Interval	1 minute
Current Display Data	Instant (user-adjustable offset available)
Current Graph Data	Instant, Hourly Reading; Daily, Monthly High and Low
Historical Graph Data	Hourly Readings; Daily, Monthly Highs and Lows
Alarms	High and Low Threshold from Instant Reading

Outside Relative Humidity (sensor located in ISS)

Resolution and Units	1%
Range	0 to 100% RH
Accuracy	±3% (0 to 90% RH), ±4% (90 to 100% RH)
Temperature Coefficient	0.03% per °F (0.05% per °C), reference 68°F (20°C)
Drift	±0.5% per year
Update Interval	50 seconds to 1 minute
Current Display Data	Instant (user-adjustable offset available)
Current Graph Data	Instant and Hourly Reading; Daily, Monthly High and Low
Historical Graph Data	Hourly Readings; Daily, Monthly Highs and Lows
Alarms	High and Low Threshold from Instant Reading

Extra Outside Relative Humidity (sensor located inside Temperature/Humidity Station)

Resolution and Units 1%

Range . . . . 0 to 100% RH

Accuracy . . . . ±3% (0 to 90% RH), ±4% (90 to 100% RH)

Temperature Coefficient . . . . 0.03% per °F (0.05% per °C), reference 68°F (20°C)

Drift . . . . ±0.5% per year

Update Interval . . . . 50 seconds to 1 minute

Current Display Data . . . . Instant (user-adjustable offset available)

Alarms . . . . High and Low Threshold from Instant Reading

Leaf Wetness (requires Leaf Wetness Sensor)

Resolution 1

Range . . . . 0 to 15

Dry/Wet Threshold . . . . User-selectable

Accuracy . . . . ±0.5

Update Interval . . . . 15 to 18 seconds

Current Graph Data . . . . Instant Reading; Daily High and Low; Monthly High

Historical Graph Data . . . . Hourly Readings; Daily Highs and Lows; Monthly Highs

Alarms . . . . High and Low Thresholds from Instant Reading

Moon Phase

Console Resolution . . . . 1/8 (12.5%) of a lunar cycle, 1/4 (25%) of lighted face on console

WeatherLink Resolution . . . . 0.09% of a lunar cycle, 0.18% of lighted face maximum (depends on screen resolution)

Range . . . . New Moon, Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Wanning Gibbous, Last Quarter, Waning Present

Accuracy . . . . ±38 minutes

Rainfall

Resolution and Units . . . . 0.01" or 0.2 mm with optional metric adapter (included) (Console rounds 1 mm if rain totals are 2000 mm or higher)

Daily/Storm Rainfall Range . . . . 0 to 99.99" (0 to 9999 mm)

Monthly/Yearly/Total Rainfall Range . . . . 0 to 199.99" (0 to 19999 mm)

Rain Rate . . . . 0 to 199.99" (0 to 19999 mm)

Accuracy . . . . For rain rates up to 2"/hr (50 mm/hr): ±4% of total or +0.01" (0.25 mm) (0.01" = one tip of the bucket), whichever is greater
For rain rates from 2"/hr (50 mm/hr) to 4"/hr (100 mm/hr): ±5% of total or +0.01" (0.25 mm) (0.01" = one tip of the bucket), whichever is greater

Update Interval . . . . 10 to 12 seconds

Storm Determination Method . . . . 0.02" (0.5 mm) begins a storm event, 24 hours without further accumulation ends a storm event

Current Display Data . . . . Totals for Past 15-min

Current Graph Data . . . . Totals for Past 15-min, Past 24-hour, Daily, Monthly, Yearly (start date user-selectable) and Storm (with begin date); Umbrella is displayed when 15 minute total exceeds zero

Historical Graph Data . . . . Totals for 15-min, Daily, Monthly, Yearly (start date user-selectable) and Storm (with begin and end dates)

Alarms . . . . High Threshold called "Flash Flood" (15-min. Total, default is 0.50", 12.7 mm), 24-hour Total, Storm Total

Range for Rain Alarms . . . . 0 to 99.99" (0 to 999.7 mm)

Rain Rate

Resolution and Units . . . . 0.01" or 0.2 mm (with optional metric adapter (included)) at typical rates (see Fig. 2 and 3)

Range . . . . 0, 0.04"/hr (1 mm/hr) to 100"/hr (0 to 1999.9 mm/hr)

Accuracy . . . . ±5% or ±0.04"/hr (1 mm/hr) (up to 10"/hr. (250 mm/hr.)), whichever is greater

Update Interval . . . . 10 to 12 seconds

Vantage Pro2™

Calculation Method . . . . Measures time between successive tips of rain collector. Elapsed time greater than 15 minutes or only one tip of the rain collector constitutes a rain rate of zero.

Current Display Data. . . . . Instant

Current Graph Data. . . . . Instant and 1-min. Reading; Hourly, Daily, Monthly and Yearly High

Historical Graph Data . . . . 1-min Reading; Hourly, Daily, Monthly and Yearly Highs

Alarm . . . . High Threshold from Instant Reading

Soil Moisture (requires Soil Moisture Sensor)

Resolution. . . . . 1 cb

Range. . . . . 0 to 200 cb

Update Interval . . . . 62.5 to 75 seconds

Current Graph Data. . . . . Instant; Daily and Monthly High and Low

Historical Graph Data . . . . Hourly Readings; Daily and Monthly Highs and Lows

Alarms . . . . High and Low Thresholds from Instant Reading

Solar Radiation (requires Solar Radiation Sensor)

Resolution and Units. . . . . 1 W/m^2

Range. . . . . 0 to 1800 W/m^2

Accuracy. . . . . ±5% of full scale (Reference: Eppley PSP at 1000 W/m^2)

Drift. . . . . up to ±2% per year

Cosine Response . . . . ±3% for angle of incidence from 0° to 75°

Temperature Coefficient . . . . -0.067% per °F (-0.12% per °C); reference temperature = 77°F (25°C)

Update Interval . . . . 50 seconds to 1 minute (5 minutes when dark)

Current Graph Data. . . . . Instant Reading and Hourly Average; Daily, Monthly High

Historical Graph Data . . . . Hourly Average, Daily, Monthly Highs

Alarm . . . . High Threshold from Instant Reading

Sunrise and Sunset

Resolution. . . . . 1 minute

Accuracy. . . . . ±1 minute

Reference . . . . United States Naval Observatory

Temperature

Inside Temperature (sensor located in console)

Resolution and Units . . . . Current Data: 0.1°F or 1°F or 0.1°C or 1°C.°(nominal). Celsius is converted from Fahrenheit and rounded to the nearest 0.1° or 1°C. Historical Graph Data and Alarms: 1°F or 1°C. Celsius is converted from Fahrenheit and rounded to the nearest 1°C.

Range . . . . +32° to +140°F (0° to +60°C)

Sensor Accuracy . . . . ±1°F (±0.5°C) typical

Update Interval . . . . 1 minute

Current Display Data . . . . Instant (user-adjustable offset available)

Current Graph Data . . . . Instant; Daily and Monthly High and Low

Historical Graph Data . . . . Hourly Readings; Daily and Monthly Highs and Lows

Alarms. . . . . High and Low Thresholds from Instant Reading

Outside Temperature (sensor located in ISS)

Resolution and Units . . . . Current Data: 0.1°F or 1°F or 0.1°C or 1°C.°(nominal). Celsius is converted from Fahrenheit and rounded to the nearest 0.1° or 1°C. Historical Graph Data and Alarms: 1°F or 1°C. Celsius is converted from Fahrenheit and rounded to the nearest 1°C

Range . . . . -40° to +150°F (-40° to +65°C)

Sensor Accuracy . . . . ±1°F (±0.5°C) typical (see Fig. 1)

Radiation Induced Error. . . . . +4°F (2°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 seconds

Current Display Data . . . . Instant (user-adjustable offset available)

Current Graph Data . . . . Instant Reading (user adjustable); Daily, Monthly, Yearly High and Low

Historical Graph Data . . . . Hourly Readings; Daily and Monthly Highs and Lows

Alarms . . . . High and Low Thresholds from Instant Reading

Extra Temperature Sensors or Probes

Resolution and Units . . . . 1°F or 1°C. Historical Graph Data and Alarms: 1°F or 1°C.Celsius is converted from Fahrenheit and rounded to the nearest 1°C

Range . . . . -40° to +150°F (-40° to +65°C)

Sensor Accuracy . . . . ±1°F (±0.5°C) typical (see Fig. 1)

Update Interval . . . . 10 to 12 seconds (40 to 48 seconds for Leaf Wetness/Temperature and Soil Moisture/Temperature Stations)

Current Display Data . . . . Instant (user-adjustable offset available)

Alarms . . . . High and Low Thresholds from Instant Reading

Temperature Humidity Sun Wind Index (requires Solar Radiation Sensor)

Resolution and Units . . . . 1°F or 1°C. Celsius is converted from Fahrenheit and rounded to the nearest 1°C

Range . . . . -90° to +135°F (-68° to +64°C)

Accuracy . . . . ±4°F (±2°C) (typical)

Update Interval . . . . 10 to 12 seconds

Sources and Formulation Used . . . . United States National Weather Service (NWS)/NOAA Steadman (1979) modified by US NWS/NOAA and Davis Instruments to increase range of use

Variables Used . . . . Instant Outside Temperature, Instant Outside Relative Humidity, 10-minute Average Wind Speed, 10-minute Average Solar Radiation

Formulation Description . . . . Uses Heat Index as base temperature. Affects of wind and solar radiation are either added or subtracted from this base to give an overall effective temperature

Current Graph Data . . . . Instant and Hourly Calculation; Daily, Monthly High

Historical Graph Data . . . . Hourly Calculation; Daily, Monthly Highs

Alarm . . . . High Threshold from Instant Reading

Ultra Violet (UV) Radiation Dose (requires UV Sensor)

Resolution and Units . . . . 0.1 MEDs to 19.9 MEDs; 1 MED above 19.9 MEDS

Range . . . . 0 to 199 MEDs

Accuracy . . . . ±5% of daily total

Drift . . . . up to ±2% per year

Update Interval . . . . 50 seconds to 1 minute (5 minutes when dark)

Current Graph Data . . . . Latest Daily Total (user resettable at any time from Current Screen)

Historical Graph Data . . . . Hourly, Daily Totals (user reset from Current Screen does not affect these values)

Alarm . . . . High Threshold from Daily Total

Alarm Range . . . . 0 to 19.9 MEDs

Ultra Violet (UV) Radiation Index (requires UV Sensor)

Resolution and Units . . . . 0.1 Index

Range . . . . 0 to 16 Index

Accuracy . . . . ±5% of full scale (Reference: Yankee UVB-1 at UV index 10 (Extremely High))

Cosine Response . . . . ±4% (0° to 65° incident angle); 9% (65° to 85° incident angle)

Update Interval . . . . 50 seconds to 1 minute (5 minutes when dark)

Current Graph Data . . . . Instant Reading and Hourly Average; Daily, Monthly High

Historical Graph Data . . . . Hourly Average, Daily, Monthly Highs

Alarm . . . . High Threshold from Instant Calculation

Wind

Wind Chill (Calculated)

Resolution and Units . . . . 1°F or 1°C. Celsius is converted from Fahrenheit and rounded to the nearest 1°C.

Range	-110° to +130°F (-79° to +54°C)
Accuracy	±2°F (±1°C) (typical)
Update Interval	10 seconds
Source	United States National Weather Service (NWS)/NOAA
Equation Used	Osczevski (1995) (adopted by US NWS in 2001)
Variables Used	Instant Outside Temperature and 10-min. Avg. Wind Speed
Current Display Data	Instant Calculation
Current Graph Data	Instant Calculation; Hourly, Daily, Monthly Low
Historical Graph Data	Hourly, Daily, Monthly Lows
Alarm	Low Threshold from Instant Calculation

Wind Direction

Display Resolution	16 points (22.5°) on compass rose, 1° in numeric display
Accuracy	±4°
Update Interval	2.5 seconds
Current Display Data	Instant (user-adjustable offset available)
Current Graph Data	Instant; 10-min. Dominant; Hourly, Daily, Monthly Dominant
Historical Graph Data	Past 6 10-min. Dominants on compass rose only; Hourly, Daily, Monthly Dominants

Wind Speed

Resolution and Units	Measured in 1 mph. Other units are converted from mph and rounded to nearest 1 km/h, 0.1 m/s, or 1 knot
Range (large wind cups, included)	2 to 150 mph, 2 to 130 knots, 1 to 67 m/s, 3 to 241 km/h
Range (small wind cups; optional, not included)	3 to 175 mph, 3 to 150 knots, 1.5 to 79 m/s, 5 to 282 km/h
Update Interval	Instant Reading: 2.5 seconds, 10-minute Average: 1 minute
Accuracy (large wind cups, included)	±2 mph (2 kts, 3 km/h, 1 m/s) or ±5%, whichever is greater
Accuracy (small wind cups; optional, not included)	±3 mph (3 kts, 5 km/h, 1.5 m/s) or ±5%, whichever is greater
Maximum Cable Length	240' (73 m). Maximum wind speed reading decreases as length of cable from Anemometer to ISS increases. At 140' (42 m), maximum speed is 135 mph (60 m/s). At 240', the maximum is 100 mph.
Current Display Data	Instant
Current Graph Data	Instant; 10-minute and Hourly Average; Hourly High; Daily, Monthly, Yearly High with Direction of High
Historical Graph Data	10-min. and Hourly Averages; Hourly Highs; Daily, Monthly, Yearly Highs with Direction of Highs
Alarms	High Thresholds from Instant Reading and 10-minute

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 Inputs

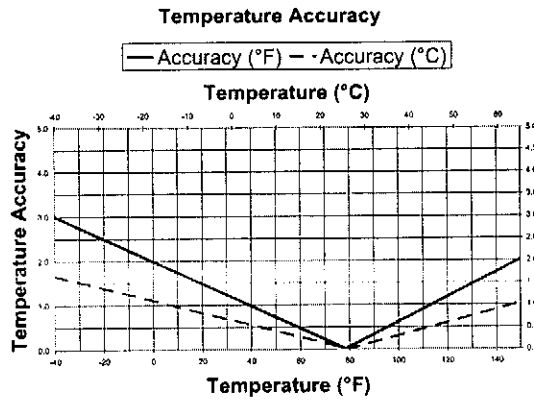|	
RF Filtering	RC low-pass filter on each signal line

Sensor Charts

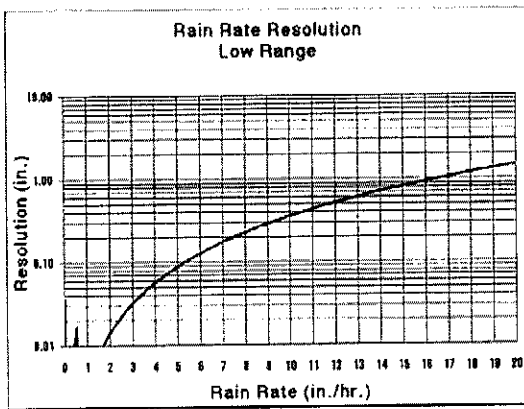*Figure 1. Temperature Accuracy*
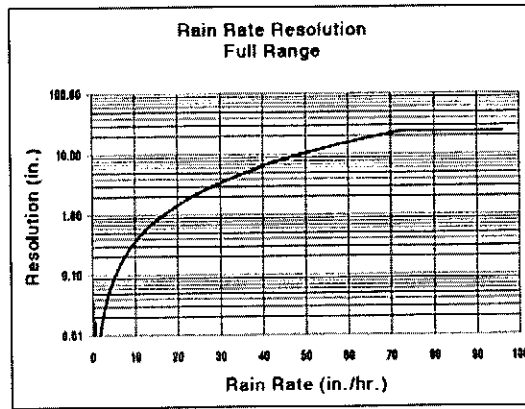

Figure 3. Low Range Rain Rate Resolution

Figure 4. Full Range Rain Rate Resolution

Package Dimensions

Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
6152 6152EU 6152UK	17.0" x 11.0" x 13.0" (410 mm x 264 mm x 330 mm)	12.8 lbs. (5.8 kg)	011698 00722 6 011698 00758 5 011698 00759 2
6162 6162EU 6162UK		13.3 lbs. (6.0 kg)	011698 00746 2 011698 00752 3 001698 00751 6
6153 6153EU 6153UK	15.0" x 13.0" x 24.0" (378 mm x 327 mm x 594 mm)	12.8 lbs. (5.8 kg)	011698 00750 9 011698 00760 8 001698 00761 5
6163 6163EU 6163UK		13.3 lbs. (6.0 kg)	011698 00747 9 011698 00762 2 001698 00763 9