

# Anemometer

6410



## Vantage Pro2™ Accessories

Includes both wind speed and wind direction sensors. Rugged components stand up to hurricane-force winds, yet are sensitive to a light breeze. Includes sealed bearings for long life. The range and accuracy specifications have been verified in wind-tunnel tests. In areas where icing of the anemometer is a problem, drip rings deflect water from the joint between moving parts.

## General

Operating Temperature . . . . .	-40° to +149°F (-40° to +65°C)
Sensor Type	
Wind Speed . . . . .	Solid state magnetic sensor
Wind Direction . . . . .	Wind vane and potentiometer
Attached Cable Length . . . . .	40' (12 m)
Cable Type . . . . .	4-conductor, 26 AWG
Connector . . . . .	Modular connector (RJ-11)
Maximum Cable Length . . . . .	240' (73 m)

Note: Maximum displayable wind speed decreases as cable increases. At 140' (42 m) of cable, maximum displayable wind speed is 135 mph (60 m/s); at 240' (73 m), maximum wind speed displayed is 100 mph (45 m/s).

Material	
Wind Vane and Control Head . . . . .	UV-resistant ABS
Wind Cups . . . . .	Polycarbonate
Anemometer Arm . . . . .	Black-anodized aluminum
Dimensions (length x width x height) . . . . .	15.0" x 1.5" x 18.0" (381 mm x 38 mm x 457 mm)
Weight . . . . .	1 lbs. 4 oz. (1.332 kg)

## Sensor Output

### Wind Direction

Display Resolution . . . . .	16 points (22.5°) on compass rose, 1° in numeric display
Accuracy . . . . .	±3°

### 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 . . . . .	1 to 200 mph, 1 to 173 knots, 0.5 to 89 m/s, 1 to 322 km/h
Accuracy . . . . .	±2 mph (2 kts, 3 km/h, 1 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.

## Input/Output Connections

Black . . . . .	Wind speed contact closure to ground
Red . . . . .	Ground
Green . . . . .	Wind direction pot wiper (20KΩ potentiometer)
Yellow . . . . .	Pot supply voltage
Wind Speed Translation Formula . . . . .	1600 rev/hr = 1 mph $V = P(2.25/T)$ ( $V$ = speed in mph, $P$ = no. of pulses per sample period $T$ = sample period in seconds)
Wind Direction Translation . . . . .	Variable resistance 0 - 20KΩ; 10KΩ = south, 180°

## Package Dimensions

Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
6410	17.75" x 10.50" x 3.00" (451 mm x 267 mm x 76 mm)	2.0 lbs. (.9 kg)	011698 00237 5