



Anemometer type 6410E

update june 13

Anemometer type 6410E 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 of this unit have been verified in wind-tunnel tests (information available upon request). A 6410 Anemometer reported wind speeds of 200 miles per hour before its tower collapsed during hurricane Andrew, 1992. Digital filtering, with time constant as specified below, is applied to wind direction measurements. In areas where icing of the anemometer is a problem, the included Anemometer Drip Rings deflect water from the joint between moving parts. **New electronic magnetic contactless sensor.**

General

Sensor Type	
Wind Speed	Wind cups and magnetic switch (contactless)
Wind Direction	Wind vane and potentiometer (typ 20 kOhm)
Attached Cable Length	40' (12 m)
Cable Type	4-conductor, 26 AWG
Connector	Modular connector (RJ-11)
Maximum Cable Length	240' (73 m)
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

Accuracy $\pm 4^\circ$ (dead band appr 6 degrees at 0/360 degree)

Wind Speed

- connections vane: : red=ground, yellow=power, green=output
 - connections anemometer: red=ground, black = + output of magnetic sensor (max 5V/20 mA)
 Recommended via 47 kOhm to 3 to 5 V D
 black is connected via resistor of typ 47kOm to 3 - 5V DC

Calibration (typical)	windspeed (m/s)= 0.998 f (Hz), electronic contact output pulse duration typ 5 msec
Range (large wind cups, included)	2 to 150 mph, 2 to 130 knots, 1 to 67 m/s, 3 to 241 km/h
Accuracy (large wind cups, included)	appr 0.5 m/s or $\pm 5\%$,
Maximum Cable Length	73 m

NOTE:

Since april 2013 no reed contact, but the new system is compatible with a reed switch if connections are as specified above

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