



## IEC Class 1 performance

Ideal for wind energy applications

### Overview

The A100LK is an anemometer for general meteorology and for wind-energy surveys. Its low power consumption and wide power-supply range make it popular for remote locations with no access to ac power, and its pulse/frequency signal is ideal for use with Campbell Scientific dataloggers. It is used as part of our WMS100 wind-monitoring system.

Rotation of the A100LK's three-cup rotor is electronically converted to pulse output signals proportional to wind speed. The A100LK produces a higher rate of pulses per revolution (up to 13) compared to relay based sensors, making it suitable for wind surveying where turbulence needs to be estimated.

### Benefits and Features

- › IEC Class 1 performance
- › Low Power
- › High rate of pulses per revolution produced makes it suitable for wind surveying applications where turbulence is estimated
- › Constructed from anodized aluminum alloys, stainless steel, and weather resistant plastics for long life
- › Bearings protected from the entry of moisture droplets and dust, resulting in an instrument suitable for permanent exposure to the weather

## Ordering Information

### Anemometer

**A100LK-L** Vector Anemometer Sensor with user-specified length. Enter length, in feet, after the -L. Must choose a cable termination option (see below).

### Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in a connector for attachment to a prewired enclosure.

### Common Accessories

**27739** Mounting Pipe.

## Specifications

- › Threshold:  $0.15 \text{ ms}^{-1}$  (starting speed  $0.2 \text{ ms}^{-1}$ , stopping speed  $0.1 \text{ ms}^{-1}$ )
- › Maximum speed:  $77.22 \text{ ms}^{-1}$
- › Accuracy:  $1\% \pm 0.1 \text{ ms}^{-1}$
- › Distance Constant:  $2.3 \text{ m} \pm 10\%$
- › Calibration Data: Supplied for anemometer and rotor at one test speed to an accuracy of  $\pm 1\%$  at  $+15^\circ\text{C}$ , 12 Vdc supply and an analog output load of  $1 \text{ M}\Omega$
- › Temperature Range:  $-30^\circ$  to  $+70^\circ\text{C}$
- › Height: 19.5 cm (7.68 in.)
- › Case Diameter: 5.5 cm (2.2 in.)
- › Rotor: 15.2 cm (6 in.) diameter three-cup rotor
- › Weight: 490 g (17.3 oz) including 3 m (10 ft) cable
- › Supply Voltage: 6.5 to 28 Vdc
- › Current Consumption: 2 mA maximum, 1.6 mA typical (no output load)
- › Power-up Time: 5 s
- › Surge Protection: Vector PC3L2 anti-surge module fitted



A100LK mounted to a crossarm via the CM220 bracket.

