



Reliable, Accurate Wind Measurements

Configured for use with
Campbell ET stations

Overview

The 034B-ET, manufactured by Met One, combines a three-cup anemometer and vane into a single integrated package to measure wind speed and direction. This wind set is constructed out of lightweight aluminum and is designed for continuous, long-term operation for your applications.

For this version of the 034B Wind Set, the cable terminates in a connector and is the ideal length for attachment to the ET107 or ET106 ETo Weather Station.

Detailed Description

The 034B-ET monitors wind speed using a three-cup anemometer that contains a sealed magnetic reed switch. Rotation of the cup wheel produces a pulse that is directly proportional to wind speed. The frequency of the pulse is measured by the datalogger pulse count channel, then converted to engineering units (mph, m/s, knots).

Wind direction is sensed with a potentiometer. With the precision excitation voltage from the datalogger applied to the potentiometer element, the output signal is an analog voltage that is directly proportional to the azimuth of the wind direction.

Specifications

| | |
|-----------------------|--------------------|
| Operating Temperature | -30° to +70°C |
| Cable Length | 170.18 cm (67 in.) |
| Weight | 907 g (2 lb) |

| Wind Speed (Anemometer) | |
|---------------------------------|----------------------------|
| Range | 0 to 75 m/s (0 to 167 mph) |
| Accuracy < 10.14 m/s (22.7 mph) | 0.1 m/s (0.25 mph) |
| Accuracy > 10.14 m/s (22.7 mph) | ±1.1% of true |

| | |
|--------------------|--|
| Resolution | (0.7998 m s ⁻¹) / (scan rate in seconds) or (1.789 mph) / (scan rate in seconds) |
| Starting Threshold | 0.4 m/s (0.9 mph) |
| Sensor Output | Pulsed contact closure |
| Anemometer Radius | 10.7 cm (4.2 in.) |
| Anemometer Height | 24.4 cm (9.6 in.) |

Wind Direction (Vane)

| | |
|------------------|----------------|
| Mechanical Range | 360° |
| Electrical Range | 356° (4° open) |
| Accuracy | ±4° |

| | |
|--------------------------|--------------------------------|
| Damping Ratio | 0.25 |
| Resolution | < 5° |
| Potentiometer Resistance | 0 to 10 kΩ (open at crossover) |
| Vane Length | 33.5 cm (13.2 in.) |

For comprehensive details, visit: www.campbellsci.com.au/034b-et 



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