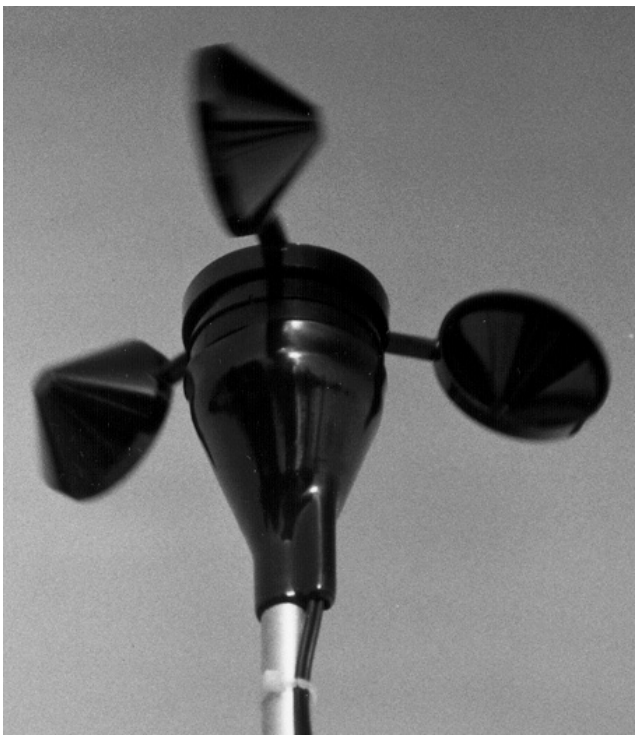
Comptus Inc.®

Model A75-104 Three Cup Anemometer

Applications

- Research measurements in environmental studies
- Engineering studies on wind effects on bridges, skyscrapers
- Control anemometer for new or existing wind warning devices
- Anemometer for wind resource assessment instrumentation



Features

- Completely self-powered with self-contained alternator.
- Very simple, elegantly engineered construction
- Dirt and water resistant, modified Teflon bearing system
- All corrosion resistant materials
- All three cups molded in one piece for repeatable performance
- Frequency output for ease of filtering and long cable runs
- Professional qualities at a minimum price

Note: Calibration reports available at additional cost.

Specifications

Threshold:
Starting threshold - 0.75 m/s (1.75 mph)
Cup distance constant (63% recovery) - 3.O m (1 0 ft.)

Materials:
Cups one piece injection molded black polycarbonate (Lexan) Body housing is black ABS plastic
Shaft beryllium copper - fully hardened
Bearing modified Teflon, self-lubricating. Rated Pv factor of 20,000 (at 15 mph, Pv is approx. 500; at 100 mph Pv is approx 2,000) Upper Bearing is centered in the plane of cup thrust for optimal loading. Permanent magnet Indox 1, 25 mm (1 in) dia., 13 mm (0.5 in) long, 4 poles

Weight:
0.1 kg (0.2 lb.)

Dimensions:
3 cups conical cross-section - 51 mm(2 in) dia.
Swept diameter of rotor - 190 mm (7.5 in)
Overall height - 51 mm (3.2 in)
Moment of Inertia of rotor assembly = 68 x 10-6 S - ft2

Mounting:
using a cotter pin on a 13 mm (0.5 in) diameter mast with a #35 hole 11 mm (.35 in) from the top

Electrical:
Single coil, bobbin wound, 4100 turns of #41 wire
Output signal is a sine wave with frequency changing linearity with wind speed - 6OHz = 102 mph
Voltage is 2.0 VAC @ 60 cycles

Environmental:
Operating temperature 55 to 60°C (-67 to 150°F)
Operating humidity range 0 to 100% RH
Gust Survival Speed : 214 MPH

Comptus Inc.® 342 Lyndeboro Rd. New Boston, NH 03070 USA
Phone : 603 487-5512 Fax : 603 487-5513 E-mail : sales@comptus.com

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