
Maximum #40 Anemometer

Features

- Simple, elegantly engineered construction.
- Dirt and wear resistant, modified Teflon bearing system.
- Corrosion-resistant materials.
- All 3 cups molded in one piece for repeatable performance.
- Frequency output for ease of filtering and long cable runs.
- Professional qualities at a minimum price.
- Superior bearings keep accuracy in hostile environments.
- Optional signal conditioners for digital and analog outputs.



The Maximum #40 Anemometer has proven to be rugged, reliable, and highly accurate. Over 100,000 units are now in use in wind tunnels, on mountain-tops, and in thousands of household, wind energy, and institutional installations. Maximum cup anemometers have recorded wind speeds up to 97 m/s (214 mph). Their low moment of inertia and unique bearings permit very rapid response to gusts and lulls. The black Lexan cups (virtually shatterproof) have thermal properties that resist and shed icing far more effectively than metal assemblies. Because of their output linearity, these sensors are ideal for use with various data retrieval systems and controllers. The unique bearing system ensures that wind-blown dirt and moisture will not destroy the bearings or degrade performance. The #40 has three conical cups molded in one continuous piece. Cup rotation induces an AC sine wave voltage in a single coil by a four pole magnet. Two sine wave cycles are produced for each revolution of the cups, with frequency directly proportional to windspeed. The unbeatable combination of high accuracy, simple yet rugged construction, and very low cost, make the #40 the first choice for professional use in all fields. Optional NIST traceable calibration is available.

Specifications

Dimensions:	51 mm (2") cup diameter 190 mm (7.5") rotor diameter 51 mm (3.2") assembly height 13 mm (0.5") mast diameter	Moment of Inertia:	68×10^{-6} sec-ft ²
Materials:	Molded Lexan black polycarbonate cups Black ABS plastic body Hardened beryllium copper shaft Teflon, self-lubricating bearing	Bearing Rating:	20,000 PV factor
Weight:	0.1 kg (0.2 lb)	Magnet:	4 permanent poles Indox
Ordering:	Western Windpower. Part Number ANEMO	Temp. Range:	-55°C to 60°C (-67°F to 150°F)
		Humidity Range:	0 to 100% RH
		Electrical:	Single coil wound bobbin 4100 turns of #41 wire 0.764 m/s per Hz (1.708 mph per Hz) Minimum 2.0 VAC at 60 cycles