

## **HAE IceFree II<sup>TM</sup> Heated Anemometer**

The HAE Anemometer is electrically heated to resist build up of ice and snow. As the body temperature is lowered by cold air, rain, snow or ice striking the head the internal heater increases its heat output. It is built to withstand over 200 MPH winds yet the HAE cup assembly's light weight and hollow design allows a high rate of heat transfer, a short distance constant of 25 feet and low power consumption. It produces a sine wave output signal that varies in amplitude and frequency with wind speed. The output signal is linear with wind speed.

The cups and body of the HAE are fabricated of aluminum with black anodized finish. It is supplied with a 0.91 M (3 foot) cable with screw lock connection.

### ***SPECIFICATIONS: HAE Anemometer***

#### **RANGE:**

Wind Speed - 0 - 25 M/S (53 MPH).  
Survival - 95 m/s (200 mph).

#### **ACCURACY:**

Wind Speed  $\pm 0.2$  M/S for 5 - 25 M/S

#### **THRESHOLD:**

Threshold sensitivity of rotor 1.1 M/S (2.5 MPH).

#### **DYNAMIC RESPONSE:**

Distance constant (63% recovery) of rotor 7.6 m (25 feet).

#### **SIGNAL OUTPUT:**

Wind Speed - magnetically induced AC. voltage.  
Slope : 0.541 M/S (1.21 Hz/ MPH)  
Offset : 0.8 M/S (1.8 MPH)  
Amplitude : 5V peak to peak @ 60 MPH

#### **POWER REQUIRED:**

Heater Power : 24 VAC @ 10.0 Amperes, Peak.

#### **OPERATING TEMPERATURE**

-40°C to 60°C

#### **DIMENSIONS**

Body diameter : 16 mm (0.625")  
Generator housing : 70 mm (2.75")  
Swept diameter : 130 mm (5")  
Overall height : 280 mm (11")

#### **MOUNTING**

Mounts over a 26.7 mm (1.05") mast

#### **WEIGHT:**

Sensor weight 1 Kg (2.3 lbs.).

#### **ACCESSORIES**

A96 Surge Arrestors  
Transformer for heater power  
Wind tunnel calibration



