

## Model 911

### WIND SPEED AND DIRECTION SENSORS

#### APPLICATIONS

- WEATHER STATIONS
- METEOROLOGICAL OFFICES
- OFFSHORE
- PORTS
- SHIPS
- MILITARY

#### FEATURES

- STANDARD 5" CUP DESIGN
- RUGGED, RELIABLE
- ENVIRONMENTALLY PROVEN
- PASSIVE SENSING ELEMENTS
- BRASS CONSTRUCTION
- STAINLESS STEEL SHAFT

#### DESCRIPTION

The Model 911 Wind sensors use a proven 3 cup anemometer, and aerofoil vane & pointer reliability and environmental capability, with passive sensor elements for ultra low power consumption applications.

The sensor set comprises the 911-A Wind speed sensor and the 911-B Wind Direction sensor.

Special attention has been paid to the design of the shaft for greatest strength, the bearings for low friction and low threshold, the balance of the moving parts for high wind speed withstand and the sealing system between the moving parts and the fixed body, for environmental integrity.

The sensors have been calibrated by a NATA laboratory and type tested up to 150km/hr for verification of strength and balance

The sensors are provided with a 1.5" BSP barrel union type mounting. This enables mounting on the end of standard water pipe or on a U channel section cross arm.

#### 911-A Wind Speed Sensor



This sensor has a 16 pole AC tachogenerator which outputs a square wave with a speed constant of approximately 2.5 Hz per Knot. The encoder makes it possible to read low wind speeds very accurately, by increasing the count integration time.

#### 911-B Wind Direction Sensor



This sensor features a 360 degree continuous rotation potentiometer giving a changing resistance or resistance ratio for changes of the wind direction, effectively with an extremely fine resolution. The inbuilt encoder element has high resistance to thermal and motional shock.

## **SPECIFICATION: MODEL 911 ANEMOMETER SYSTEM**

### **911-A WIND SPEED SENSOR**

3 cup anemometer coupled to a 16 pulse per rev. AC tachogenerator.

Measuring Range	0-120 knots
Shaft	6 mm diameter 304 stainless Steel
Output	Speed Constant 2.5 Hz/ Knot
Output Level	25 mV P-P per knot
Resolution	1 knot (+/- 0.5m/s)
Threshold	1 knot
Weight	12 kg Nett, 18 kg packed

### **911-B WIND DIRECTION SENSOR**

Counter-balanced aerofoil coupled to a 360 Degree continuously rotating potentiometer

Measuring Range	0-359 degrees
Shaft	6 mm diameter 304 stainless Steel
Output	2000 ohm potentiometer
Resolution	<1 degree
Weight	12 kg Nett, 22 kg packed

### **GENERAL SENSOR DATA:**

The sensors are supplied with 15 meters of screened 4 core cable and matching connectors

Dimensions	90mm diameter x 140mm height
Mounting	1.5" B.S.P. female thread mounting
Material	Brass.

### **ACCESSORIES**

911-BDS	Body Disassembly Jig
911-TNS	Top Nut Spanner.

Due to our policy of continual product improvement, specifications may change without notice.

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