AIRMAR TECHNOLOGY CORPORATION

Sensing Technology

WeatherStation® Instrument Calibration Certificate

Model: **PB200**
ID: **1985270**
Calibration Date: **5/25/2010**
Manufacturer: Airmar Technology Corporation, Milford NH USA
Test Procedure: 96-154-01

The WeatherStation® Instrument passes testing for IPX-6 heavy seas water standards and the IEC 60945 standards for exposed units[1]. All units are calibrated in an onsite wind tunnel[2].

Unit Test Results:

Test Performed	Logged Value	Test Requirement
0 Knot Wind	0.7	Less than 1 Knot Max
50 Knot Cal [4]	N/A	Within ±2 Knots
Humidity	N/A	Within ±5 % RH
Temperature [5]	22.3	Within ±1.1 °C
Pressure	1009.7	Within ±20 mBar
Rate Gyro – Dynamic [6]	N/A	Under 4 deg/sec average error
Rate Gyro – Static	11.700000	Within ±40 Deg/min
Pitch	0.0	Within 1°
Roll	0.0	Within 1°

Ambient (Local) Test Conditions [3]:
Humidity: 54.0 %RH
Temperature: 22.9 Deg C
Pressure: 1009.7 mBars

Equipment List

- **Wind Tunnel Calibration**
  - **United Sensor Corp. Pitot Tube – Calibrated to NIST traceable pitot tube**
  - **MKS Instruments Pressure Sensor**
  - **BK Precision® 5491A Multimeter**
- **Ambient Temperature Readings (Temperature, humidity and pressure)**
  - **Vaisala® PTU200**
- **Rate Gyro Testing**
  - **SEI A2 Absolute encoder**
  - **US Digital R164 Motor Controller**

1 – After multiple heat cycles above 65° C (149°F) wind anemometer performance may require recalibration to remain within specifications at wind speeds above 50 knots (92.6 km/h) .

2 – The on site wind tunnel is calibrated with a pitot tube, which in turn was calibrated with a NIST traceable pitot tube.

3 – Ambient conditions measured with a Vaisala PTU300. Temperature, humidity and pressure readings compared to Vaisala PTU300. The temperature, pressure and humidity readings from the Vaisala® instruments were calibrated by Vaisala® against instruments calibrated to NIST traceable instruments.

4 – Units are calibrated at 50 knots with a full circle multipoint calibration.

5 – Temperature recorded with 4+ knots of wind present.

6 – Test conducted at 70 degrees per second.