

Document Number		RG_SPEC-0004	
Title		Aero 4 Sensor	
Revision	Date	Prepared By	Change History
1.21	09/29/2011	Chris Brown	Updated weight.

Introduction

This sensor has 4 inputs measuring dynamic differential pressure compared to a single static reference port. Sensor output is a 0-5 volt variable voltage.

Mounting

This sensor should be mounted with soft Velcro to help absorb vibrations.

Specifications:

Part #:	M AERO 4
Output Method:	0 – 5 volt DC
Resolution:	0.01 kPa
Update Rate:	> 1000 Hz
Response Time:	0.001 sec
Supply Voltage:	5 VDC
Temp Range:	-20° to 85° C
Weight:	122 g

Calibration

Δ -60" H ₂ O =	-14.95 kPa = 0.25 vdc
Δ -30" H ₂ O =	-7.47 kPa = 1.25 vdc
Δ 0" H ₂ O =	0.00 kPa = 2.25 vdc
Δ 30" H ₂ O =	7.47 kPa = 3.25 vdc
Δ 60" H ₂ O =	14.95 kPa = 4.25 vdc

Connection:

Mating connector: AS610-35SN

- pin 1 – Port 1
- pin 2 – Port 2
- pin 3 – Port 3
- pin 4 – Port 4
- pin 5 – no connection
- pin 6 – no connection
- pin 7 – no connection
- pin 8 – no connection
- pin 9 – 0 volts
- pin 10 – 5 volt, for using "Ratiometric" setup
- pin 11 – 5 volt, tied internally to pin 10
- pin 12 – no connection
- pin 13 – 6 to 20 volt, for "Absolute Voltage" setup

The M Aero 4 was designed to use only one voltage input. Use either pin #10 or pin #13, do not use both. When using pin #13, there is an internal 5 volt regulator which supplies voltage to the sensor.

