MITSUMI

Digital output air velocity sensor

MMS651P003N1

Outline

This product is an air velocity sensor using MEMS technology. The product mounts a ⊿Σ AD converter with a resolution of 16bits and outputs a high-accuracy air velocity value as a digital value. I2C is adopted for the interface and communication is performed with a microcomputer.

Applications

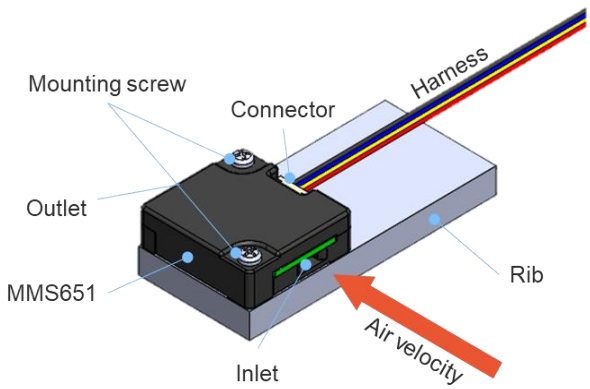
- Fan Filter Unit (FFU)
- Measurement of light breeze indoors, such as the downflow in a cleanroom
- Other devices that utilize airflow or air velocity

Features

① Small package
② High-accuracy measurement
③ ⊿Σ AD converter with a resolution of 16 bits and outputs a high-accuracy velocity value as a digital value.
④ Achieves high installation flexibility with "no piping required" and "communication via connectors."

Block Diagram

Installation Image

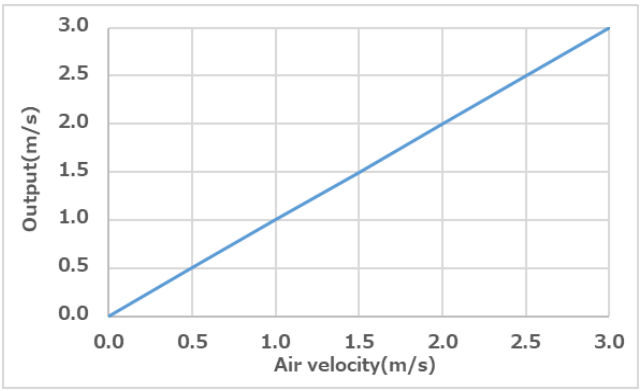


Specification（Draft）

ITEM	SPECIFICATION
Measurement range	0 m/s to 3 m/s
Calibrated for	Air
Accuracy Note	±3 %F.S. (0.3 m/s ≦ air velocity ≦ 3.0 m/s) ±7 %F.S. (0.0 m/s ≦ air velocity ＜ 0.3 m/s)
Supply Voltage	3.0 V to 3.6 V
Operating Temperature	-10 ℃ to 60 ℃
Response Time	< 90 msec.
Resolution	16 bit
Interface	I2C
Size	22.5 (W) x 21 (D) x 7 (H) mm

Note : The values are calculated from the measurements taken at our designated wind tunnel, at 25 degreeC, 101.3 kPa (1 atmosphere), and Vcc 3.3 V.

Typical Performance Characteristics



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