MITSUMI

Digital output air velocity sensor

MMS651P010N1

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

HVAC/VAV, FAN, Data center, Projector, FFU

Devices using air flow or air velocity

Features

① Small package

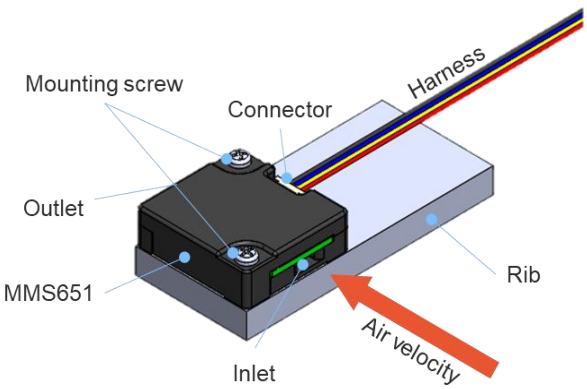
② High-accuracy measurement

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

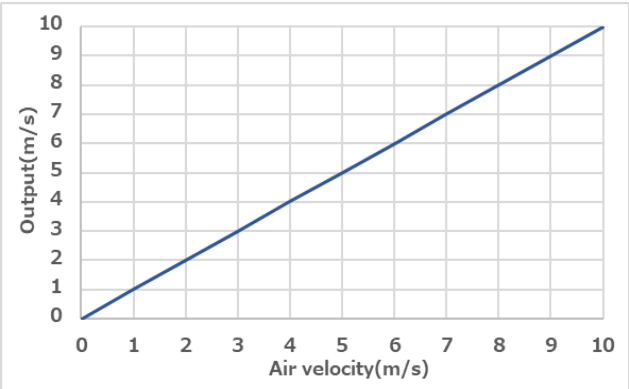


Specification（Draft）

ITEM	SPECIFICATION
Measurement range	0 m/s to 10 m/s
Calibrated for	Air
Accuracy Note	±5 %R.D. (4 m/s ≦ air velocity ≦ 10 m/s) ±2 %F.S. (0 m/s ≦ air velocity ＜ 4 m/s)
Supply Voltage	3.0 V to 3.6 V
Operating Temperature	-10 ℃ to 60 ℃
Response Time	＜ 90msec.
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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