# MITSUMI

### Product image for illustration purposes only.

Digital output flow velocity sensor

**MMS651** 



#### Outline

This product is a flow velocity sensor using MEMS technology. The product mounts a  $\Delta\Sigma$  AD converter with a resolution of 16bits and outputs a high-accuracy flow velocity value as a digital value. I2C is adopted for the interface and communication is performed with a microcomputer.

#### Applications

HVAC/VAV,FAN,Projector Devices using air flow velocity

#### Features

- ① Small package
- 2 High-accuracy measurement
- ③ ΔΣ AD converter with a resolution of 16 bits and outputs a high-accuracy velocity value as a digital value.

#### Specification (Draft)

ITEM	SPECIFICATION		
Calibrated for	Air		
Measurement range(*)	0m/s to 10m/s		
Accuracy	±5%RD		
	$(1m/s \leq flow \ velocity \leq 10m/s)$		
Supply Voltage	$2.7  ext{V} \sim 3.6  ext{V}$		
Operating Temperature	-10℃ to 60℃		
Resolution	16bit		
Interface	I2C		
Size	21.5(W) ×19.0(D) ×14.0(H)mm		

\*Measurement range can be customized

#### **Block Diagram**



#### **Typical Performance Characteristics**



## Minebeanitsumi minebeamitsumi semiconductor Q Search Mitsumi Electric CO.,LTD. Passion to Create Value through Difference https://product.minebeamitsumi.com/en/product/category/sensor/ics/ Semiconductor Business Division Strategy Engineering Department tel:+81-46-230-3470

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# Highly accurate thermal flow type sensor (digital output) capable of capturing wind speeds of up to 10 m/s<sup> $\times$ </sup>. (Digital output)

#### **%Customizable**

This product is a flow velocity sensor using MEMS technology. The product mounts a  $\Delta\Sigma$  AD converter with a resolution of 16bits and outputs a high-accuracy flow velocity value as a digital value.

#### Example of use(How sensors are used)

HVAC/VAV
 Monitoring of ventilation system abnormalities





Server
 Wind Speed Monitor
 Filter clogging detection



anemometerVisualization of wind speed



Development Schedule

MMS651	TS	ES	MP
	Feb.'23	Sep.'23	Feb.'24

\* Please understand that the schedule is subject to change without notice.

\* Other specifications Please contact us individually for more information.