

Digital output differential pressure sensor

### Product image for illustration purposes only.

# **MMS601**





#### Outline

This product is a small differential pressure sensor using MEMS technology. Thermal flow MEMS can be high-accuracy measurement with low preesure level. The product mounts a  $\Delta\Sigma$  AD converter with a resolution of 24 bits and outputs a high-accuracy pressure value as a digital value. I2C is adopted for the interface and communication is performed with a microcomputer.

#### **Applications**

CPAP, Ventilator, HVAC/VAV

Devices using air differential pressure

#### **Features**

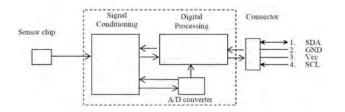
- ① Small package 26.0(W) ×18.0(D) ×24.0(H)mm
- 2) High-accuracy measurement with low preesure level
- ③ ΔΣ AD converter with a resolution of 24 bits and outputs a high-accuracy pressure value as a digital value.

#### Specification (Draft)

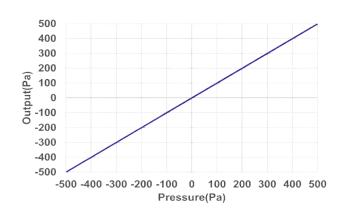
ITEM	SPECIFICATION		
Calibrated for	Air		
Measurement range	-500Pa to 500Pa / 0Pa to +250Pa / -50Pa to 50Pa		
Zero point accuracy	±0.2Pa		
Span accuracy	±3%RD		
Supply Voltage	2.7V ~ 3.6V		
Flow step response time	5msec		
Span shift due to temperature variation	0.5%RD/10°C		
Operating Temperature	-20°C to 80°C		
Resolution	24bit		
Interface	I2C		
Size**	26.0(W) ×18.0(D) ×24.0(H)mm		

**%TBD** 

#### **Block Diagram**



#### Typical Performance Characteristics







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## Differential pressure sensor capable of measuring a pressure range of ± 50 Pa\* with high accuracy (±3%RD) (MEMS Calorimetric (thermal flow))

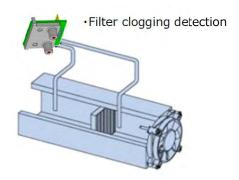
**\*\*Customizable** 

This product is a small differential pressure sensor using MEMS technology. Thermal flow MEMS can be highaccuracy measurement with low preesure level.

- ◆Example of use(How sensors are used)
  - HVAC/VAV
  - ·Airflow control







- CPAP
- ·Breath detection



- Oxygen concentrators
- ·Breath detection



- Robot
- ·Contact detection



◆ Development Schedule

MMS601	TS	ES	MP
	Feb.'23	Apr.'23	Sep.'23

- \* Please understand that the schedule is subject to change without notice.
- \* Other specifications Please contact us individually for more information.