

Digital output flow sensor

MMS501

Product image for illustration purposes only.



Outline

This product is a flow sensor using MEMS technology. The product mounts a $\Delta\Sigma$ AD converter with a resolution of 24 bits and outputs a high-accuracy flow rate value as a digital value. I2C is adopted for the interface and communication is performed with a microcomputer.

Applications

Medical application, combution application Devices using flow rate

Features

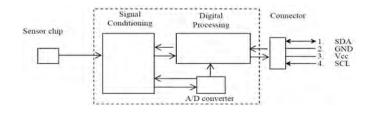
- 1 High-accuracy measurement
- ② Mass flow rate measurement with thermal flow MEMS Chip.
- ③ ΔΣ AD converter with a resolution of 24 bits and outputs a high-accuracy flow rate value as a digital value.

Specification (Draft)

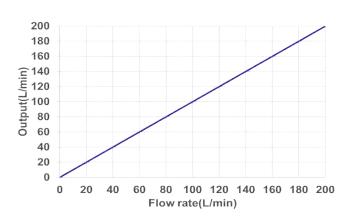
SPECIFICATION	
Air,Natural gas	
-250L/min to 250L/min	
±5%RD(10% to 25%FS)	
±3%RD(25% to 100%FS)	
2.7V ~ 3.6V	
-20℃ to 80℃	
24bit	
I2C	
73(W) ×24(D) ×38(H)mm	

^{*}Measurement range can be customized

Block Diagram



Typical Performance Characteristics







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- $\blacksquare \ \, \textbf{The details listed here are not a guarantee of the individual products at the time of ordering. When using the products, you will be asked to check their specifications.}$

Thermal flow sensor capable of capturing air/heated gas flow rates up to 250 L/min^{*}.(Digital output)

***Customizable**

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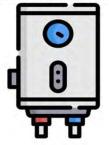
- ◆Example of use(How sensors are used)
 - CPAP
 - ·Breath detection



- Compact fuel cell system
- •Flow measurement of air and combustion gases



- Gas water heater
- •Flow measurement of combustion gases



- Smart Gas Meter
- •Flow measurement of combustion gases



- Air conditioning management
- Air visualization



- Spirometer
- Lung capacity check



◆ Development Schedule

MMS501	TS	ES	MP
	Feb.'23	May.'23	Oct.'23

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