Product information

FSE-122 Sensor Electronics Modules
Gas Velocity and Temperature sensing

The FSE-122 Sensor Electronics Modules use Flusso's proprietary MEMS-based sensor technology for gas velocity and temperature measurements.

A peripheral measurements option or axial measurements option is provided depending on the chosen sensor electronics module design.

The optimal functionality and sensing performance of the FSE-122 modules are achieved through the combination of the advanced FLS122 sensor, Flusso's firmware, and reference electronics design.

Designed with a small footprint, these modules can be easily integrated into final products. Flusso also provides comprehensive support for integration, when additional customisation is required for specific applications.

Key benefits

• Peripheral or axial measurements directly into your gas stream

• Proprietary MEMS-based technology

• Reference electronics for optimal sensing functionality

• Application-specific custom calibration available

• Comprehensive support from Flusso

Applications
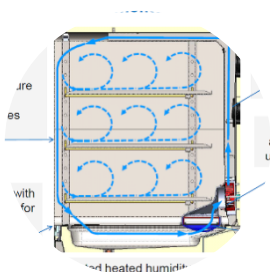
Temperature and climatic chamber air circulation management

Gaming PC thermal management

Ventilation control and filter monitoring

Consumer appliances

Product information

Features

- Silicon-MEMS Sensor measurements
- Reference electronics design with hosted Flusso firmware
- Fully temperature-compensated readings
- SDK available to modify the application layer and make use of spare microcontroller resources
- 10-pin host interface connections with I^{2}C interface
- Fully compatible with Flusso's GUI for quick evaluation

FSE-112 Sensor Electronics Module specifications

Parameter			Reduced size module *(Peripheral measurement)*	Extended module *(Axial measurement)*	
				Adapter PCB	**Extended PCB**
Footprint			22 mm x 16 mm	44 mm x 40 mm	36 mm x15 mm
Measurement Range	Flow velocity		±20ms^{-1}		
	Temperature		-20 to +85 °C		
Max Accuracy	Flow Velocity	Zero Flow	±0.1 ms^{-1} (equivalent to 0.5% of full scale)		
		Span	±5 % of measured value		
	Temperature		±2-3 °C		
Power Consumption	Continuous Mode		20 mW *		
	Idle Mode		3.3 µW		
Operating Conditions	Temperature		-20 to +85 °C		
	Humidity		0 to 90 %RH		
Output signal			I^{2}C (bidirectional)		
Input Voltage			3.3 V		

* Derated if in single shot reading

Ordering guide

Type no	Packing type	Part no
FSE122	Standard Air Velocity Sensor Electronics Module	FSE-122-O- STM32-R
	Extended Air Velocity Sensor Electronics Module	FSE-122-O-STM32-X

For further application information please contact **sales@flussoltd.com**