

# Particulate matter sensor

## SAPS series



### Features

- PM2.5 output
- Rapid response time
- Accurate measurement thanks to laser-based technology
- Resistant to dust and water
- Compliant with RoHS and REACH
- Fully customizable for dashboard or HVAC integration, reducing installation time and costs

Spending time in an enclosed vehicle with poor air quality can be detrimental to our health. One of the most dangerous indoor air pollutants is PM2.5, particulate matter with a diameter of less than 2.5 microns. These miniscule particles can travel deep into the human lung, leading to a range of health complications. By issuing alerts via the LIN when cabin air quality changes, our sensor informs the HVAC system that adjustments need to be made to improve ventilation and air exchange.

### Specifications

SAPS series specifications	
Particle size	PM2.5 (0.3-2.5 $\mu\text{m}$ )
Mass concentration range	0-1,000 $\mu\text{g}/\text{m}^3$
Mass concentration resolution	1 $\mu\text{g}/\text{m}^3$
Accuracy (to Standard reference and KCl)*	$\pm 15 \mu\text{g}/\text{m}^3$ (1 to 100 $\mu\text{g}/\text{m}^3$ ) and $\pm 15\%$ (100 to 1,000 $\mu\text{g}/\text{m}^3$ )*
Operating temperature range	-40 to +80 °C
Guaranteed accuracy temperature range	-20 to +65 °C
Storage temperature range	-40 to +85 °C
Supply voltage	9-16 V
Electrical interface	LIN2.1
IP ranking	IP52 with air tight flow channel design*
Dimensions	73 mm $\times$ 30 mm $\times$ 40.4 mm**
Weight	< 100 g

\* To avoid particulate settling or accumulation at the air outlet or air inlet, which may affect product sensitivity, response time and accuracy, ensure that the SAPS series are installed by Sensirion Automotive Solution instruction. Please contact [info@sensirion-automotive.com](mailto:info@sensirion-automotive.com) for further details.

\*\* Dimensions of SAPS series main body, not including mechanical parts for installation.