

Environmental node

SAEN series



Features

- All-in-one environmental platform (PM1, PM2.5, RH, T, CO, CO₂, NO_x, VOC)
- CO₂ concentration monitoring for indoor comfort
- Fully customizable for different application needs
- Dust-protection and long lifetime
- Simplifies integration, reduces costs and saves energy

All-in-one environmental platform to simplify indoor air quality monitoring in vehicles. The modular platform combines multiple sensors in a never-before-seen form factor and can measure up to eight environmental parameters (PM1, PM2.5, RH, T, CO, CO₂, NO_x, VOC). At its core is a miniaturized, MEMS-based PM sensing component. Together with the patented geometric arrangement, it allows the integration of the light source, detector, signal processing and algorithm into a cost and space efficient solution.

Specifications

SAEN series specifications*		
Operating temperature range	-40 °C to +80 °C**	
Storage temperature range	-40 °C to +85 °C	
Supply voltage	9-16 V	
Electrical interface	LIN 2.1/2.2	
Dimensions	45 mm × 57 mm × 31 mm	
Weight	55 g	
IP rating**	IP00, IP52 for indoor air	IP54 for outdoor air
Relative humidity/temperature**	-40 °C to +80 °C / response time <15 s	-40 °C to +80 °C / response time <25 s
Particulate matter precision (PM1, PM2.5)**	±10 µg/m ³ (1 to 66 µg/m ³)	
	±15% (66 to 1,000 µg/m ³)	
CO ₂ accuracy (400 -10,000 ppm)**	0 °C - 50 °C: ± 200 ppm or ± 10% m.v. apply whatever is higher	
Gas sensor**	Indoor TVOC index	NO _x /CO 10 AQS Lvs

* Product is under development – specifications are subject to change.

** For detailed specifications for each parameter please contact us.