
Particle sensor technologies
Particle instruments
Particle sensors
pegasor
YOUR PARTNER
IN ULTRAFINE PARTICLE
MEASUREMENTS.

Your partner in particle measurements

Pegasor Oy is a Finnish environmental technology company specialized in ultrafine particle detection technologies. We have over 15 years of experience in providing both ready-made devices for standalone particle measurements and particle sensor technologies for our OEM partners. Pegasor products are used globally by thousands of customers in numerous measurement applications and in demanding environments.

Today, Pegasor patented technology is available as ready technology solutions and via licensing agreements for our industrial partners. The unique Pegasor technology has multiple advantages:

- Accurate, simultaneous monitoring of particle number, LDSA and mass concentrations as well as particle size in one device
- Detection of the ultrafine particles that are the most harmful to human health
- Extremely fast response
- Minimal maintenance even in long-term operation
- Direct measurement of hot sample when needed
- Compact size and robust construction
- Multiple user interfaces
- Customizable features

Our in-house R&D team is available to assist our technology partners throughout the integration process so that you have all the tools you need to be successful with your products.

Contact us today to see how we can help you succeed!

Pegasor Oy
Hatanpään valtatie 34C
33100 Tampere, Finland

www.pegasor.fi
sales@pegasor.fi

OEM sensors for integration

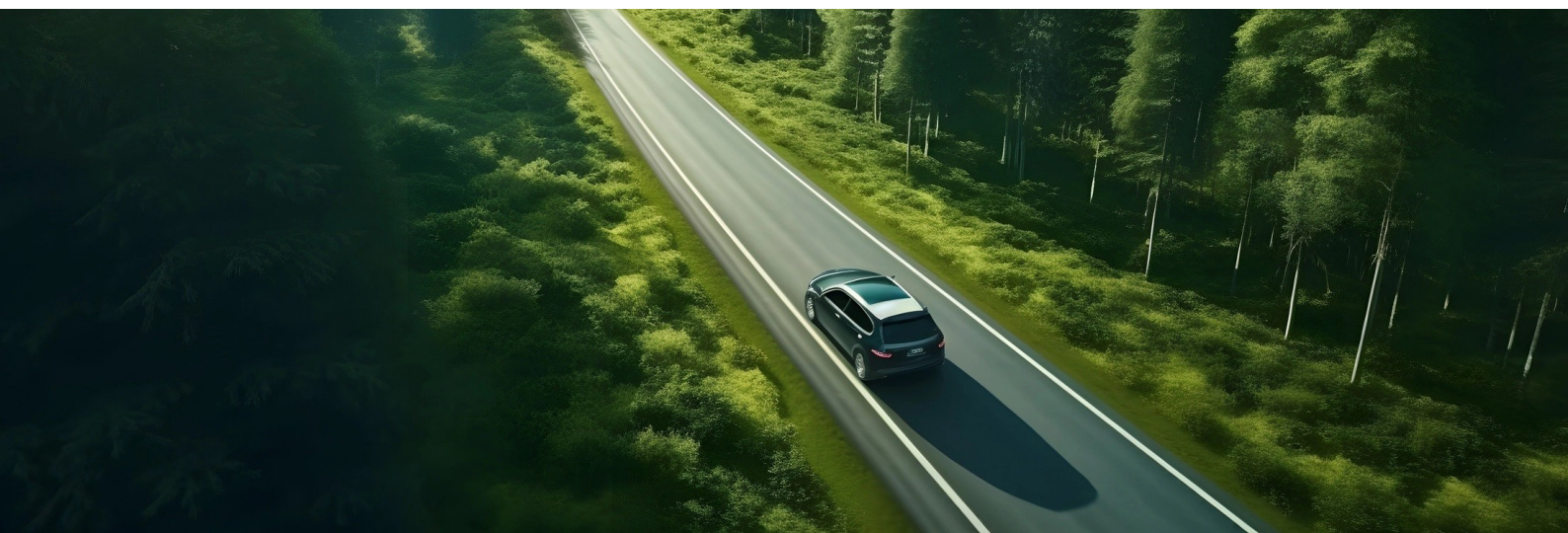
Pegasor PPS-G2 particle sensor

The Pegasor PPS-G2 sensor offers a comprehensive solution for precise and consistent, **real-time particle number concentration monitoring**. Originally designed for periodic technical inspection (NPTI) measurements, the PPS-G2 now comes with a range of features that make it an ideal choice for a variety of ultrafine particle monitoring applications. **Designed for OEM integration**, the PPS-G2 offers a range of data communication options that allow **seamless integration** into larger systems.

The PPS-G2's unique design ensures continuous and stable long-term measurements without maintenance even in high-concentration environments. The sample treatment and particle detection are integrated in the Pegasor PPS-G2 sensor design to provide **accurate and repeatable** results for particle number concentration measurements. When required, the sensor element in the PPS-G2 is heated and an additional VPR (volatile particle remover) is used for efficient hydrocarbon removal.

Features

- **PN, LDSA, PM concentration and particle size** measurement
- Simple and **robust** structure – no moving parts, no need for working fluids
- Flow-through design – extremely **long maintenance intervals**
- Extremely **high time resolution** and response time of 0.2 s
- **No dilution required** – direct measurement of hot sample
  - Option to heat the sensor module up to 200° C to prevent condensation
  - Option to add an integrated VPR for volatile particle removal
  - Available also without heater elements
- **Variety of data communication options** available
- **Extensive self-diagnostic** system to increase reliability
- **Large dynamic range** suited to a range of applications
- **Customizable** for specific needs



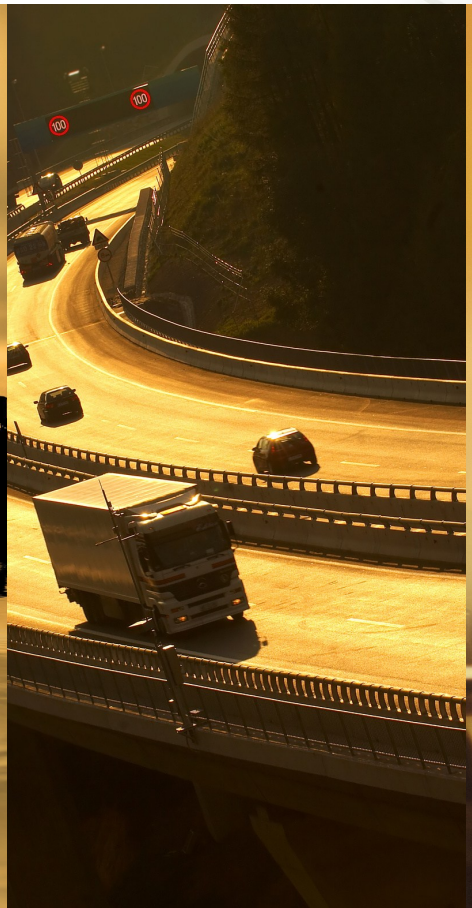
Emission monitoring

Pegasor Particle Counter PPC

Pegasor solution for emission and exhaust monitoring is the PPC—Pegasor Particle Counter. The PPC is a complete, standalone solution for monitoring PN, LDSA and PM concentrations as well particle size in real-time. The system is designed for routine monitoring, it is easy to set-up and operate, and has extremely long maintenance intervals. PPC is controlled via laptop/tablet connected to the unit via Bluetooth or serial/USB/Ethernet connection.

Features

- **PN, LDSA, PM concentration and particle size** measurement
- **Plug and play** design for easy operation
- Simple and **robust** structure – no moving parts, no need for working fluids
- Extremely **long maintenance intervals**
- Extremely **high time resolution**
- **No dilution required** – direct measurement of hot sample
  - Integrated VPR and heater sensor module
  - Heated sampling line for sample transport
- **Extensive self-diagnostic** system to increase reliability
- Large dynamic range suited to a **range of applications**



Air quality monitoring

For outdoor air: Pegasor Airam

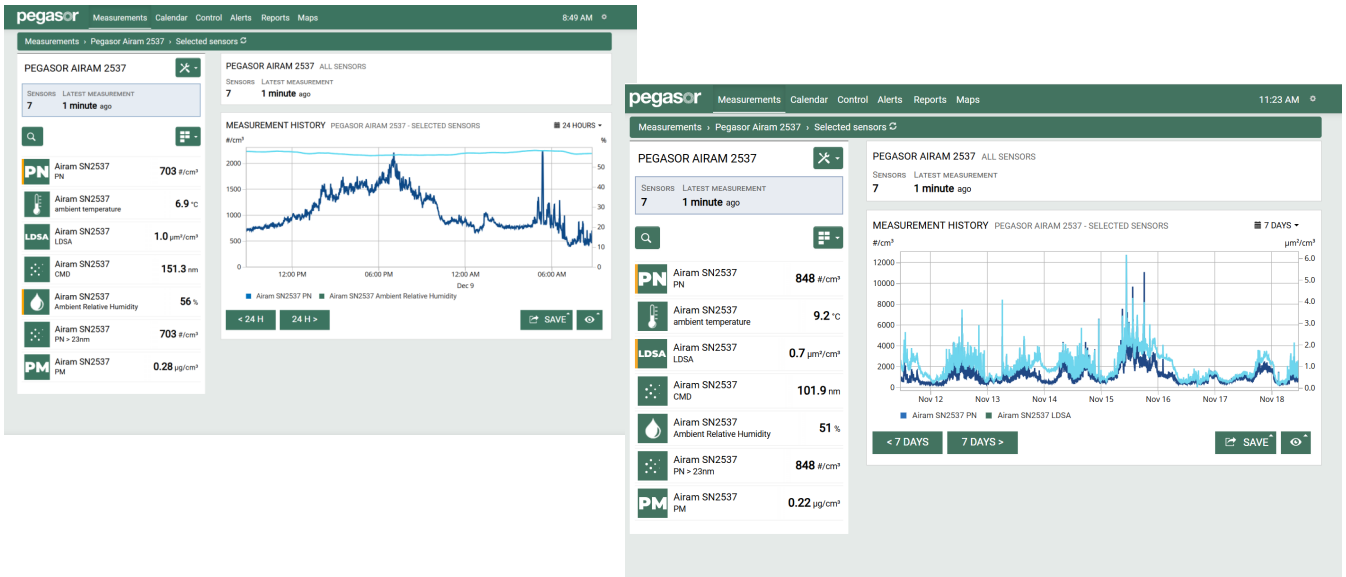
For air quality monitoring, Pegasor offers the Pegasor Airam unit that is a **standalone monitor** for measuring **ultrafine particles** in ambient, outdoor air. The Airam system is powered by the Pegasor PPS-G2 sensor that provides **real-time** and accurate information on **particle number (PN), lung deposited surface area (LDSA), particle mass (PM) and particle size**. The Airam goes beyond traditional PM10 and PM2.5 measurements, aligning with WHO recommendations (global air quality guidelines 2021) and the new EU Air Quality Directive for monitoring ultrafine particle number concentration in urban environments. Customizable for customer specific needs, the Pegasor Airam is an ideal choice for long-term monitoring of UFP concentrations both in low and high concentration environments.

For indoor air: Pegasor Airin

Pegasor Airin is a compact **standalone monitor** for monitoring **ultrafine particles** in **indoor environments**. The Airin unit uses the Pegasor PPS-G2 sensor for real-time measurement of particle number (PN), lung deposited surface area (LDSA), particle mass (PM) concentrations and also particle size. The Pegasor Airin is an ideal tool researchers, occupational hygienists, or anyone concerned about healthy indoor air to monitor ultrafine particle concentration and size.

Pegasor Cloud Portal

Pegasor cloud portal is an additional, online service for monitoring data from one or more Airam or Airin units remotely. This cloud based system is an easy way to monitor the measured data and instrument operation, and create reports for more detailed analysis. Multiple units can be connected to the Pegasor cloud portal at any given time.



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Expertise in ultrafine particle detection technologies.

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