PEGASOR PPS-1000

REAL-TIME ULTRAFINE PARTICLE MONITORING FOR HEALTHIER INDOOR ENVIRONMENTS

Ultrafine particles are often not detected by conventional indoor air quality monitors, yet they can have a significant impact on indoor air quality and human exposure. Pegasor PPS-1000 provides real-time insight into ultrafine particle levels, helping users understand, compare, and improve indoor environments.

PPS-1000 combines Pegasor's proven particle sensing technology with a modern, compact design and integrated connectivity. The system measures particle number concentration, lung deposited surface area, particle mass, and median particle size, providing a comprehensive view of indoor particle conditions.

- Real-time UFP monitoring
- PN, LDSA, PM and particle size in one device
- Cloud-connected data access
- Integrated modem inside the unit
- Low-maintenance operation
- No consumables or operating liquids

Real-time UFP data

Compact. Connected

PEGASOR PPS-1000

Pegasor PPS-1000 is a compact ultrafine particle monitoring device for indoor environments. Equipped with the robust and low-maintenance Pegasor PPS-G2 sensor, it provides real-time data on particle number concentration, particle mass, lung deposited surface area, and median particle size. Designed for easy everyday use, PPS-1000 features a simple single-button interface and a quiet integrated pump for unobtrusive operation in offices, schools, laboratories, public buildings, and other indoor spaces.

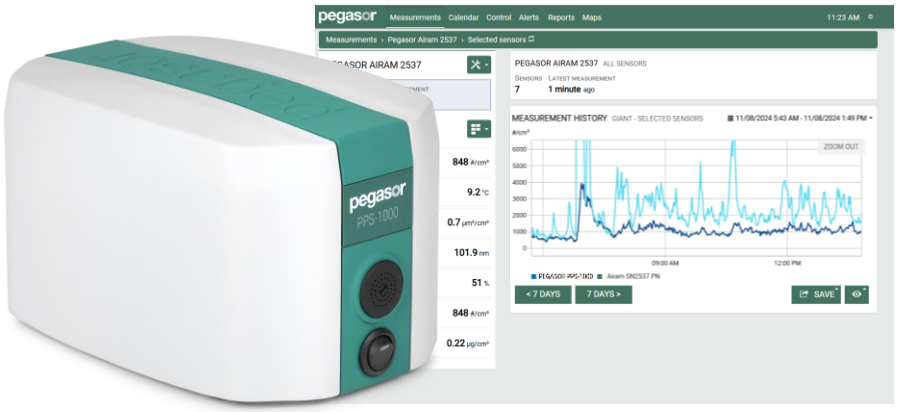
At the heart of PPS-1000 is Pegasor's advanced electrical particle detection technology. The PPS-G2 sensor combines an ejector pump with a diffusion charger, where sample particles are charged in an ionized air flow. Excess ions are removed by an electrostatic trap, which also enables rapid particle sizing based on electrical mobility. As charged particles exit the sensor, their electrical current is measured. By combining current and size information, PPS-1000 accurately calculates particle number, particle mass, and LDSA concentrations in real time.

APPLICATIONS

- Indoor air quality monitoring
- Occupational hygiene and exposure assessment
- Research and development
- Public buildings, workplaces, schools, laboratories, and industrial indoor environments

CLOUD-CONNECTED MONITORING

Pegasor PPS-1000 can be connected to the Pegasor Cloud Portal for remote data access, storage, and reporting. The integrated modem enables straightforward data transfer from the device to the cloud, making it easy to monitor one or multiple PPS-1000 units from anywhere. Through the Pegasor Cloud Portal, users can view measurement trends, check device status, create reports, export data for detailed analysis, and access measurement data through an API interface for integration with external systems.



SENSOR PERFORMANCE

PPS-G2 sensor performance measured by Federal Institute of Metrology METAS: Test report 235-11079.

Concentration range	30 – 100 000 000 #/cm³
Particle size range	10 – 200 nm for PM and particle size 10 nm – 1 µm for PN and LDSA
Response time	0.2 s
Sample flow rate	1.5 lpm
Communication	Cloud connection, Ethernet, Modbus, USB
Power requirements	24 VDC, 6 W, 0.25 A
Dimensions	226 x 146 x 127 mm
Weight	2.1 kg

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