



DPF & GPF operation check

Reliable, Fast Measurement

Pegasor Solutions for  
**DPF / GPF PERFORMANCE TESTING**

**pegasor**

# Accurate DPG & GPF Testing



## Why It Matters

The Pegasor Particle Counter (PPC) provides a quick, intuitive way to check diesel particulate filters (DPFs) and gasoline particulate filters (GPFs) on both light- and heavy-duty vehicles. It's widely used across Europe for particle-number (PN) checks during PTI/MOT inspections, and is officially approved in Germany, the Netherlands, Belgium, and Switzerland.

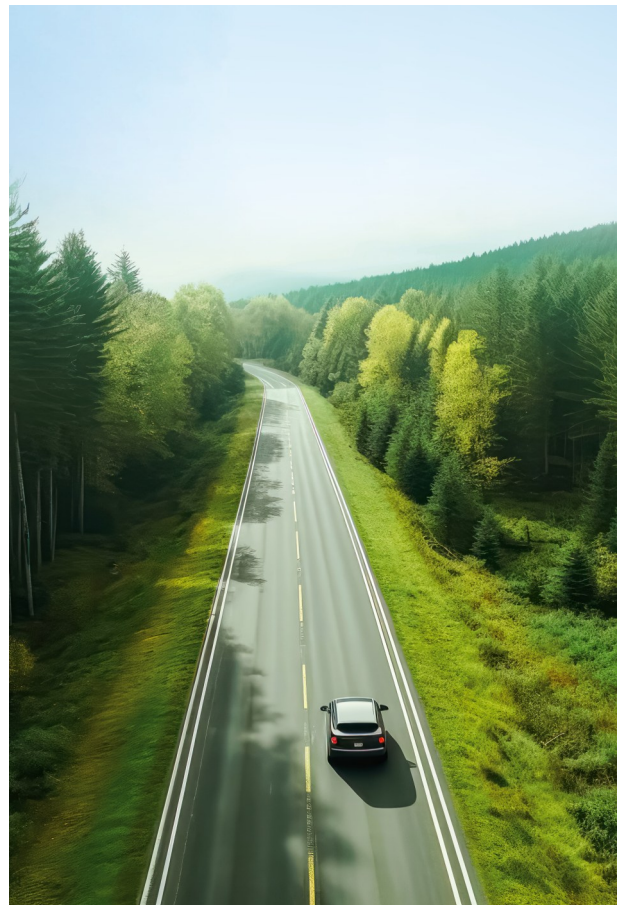
DPF and GPF filters trap harmful ultrafine particles from combustion. When functioning properly, they can cut particle-number emissions by more than 99%. Conventional optical particle measurement methods still used at many inspection stations, however, often fail to detect filters that are internally damaged, removed, or degraded. This creates a serious blind spot in emissions monitoring.

As a result, harmful high-emitting vehicles may go unchecked contributing to air pollution and health risks. The PPC addresses this by offering sensitive, real-world verification of filter presence and performance, helping meet stricter regulations and emissions standards.

## Why Verify DPFs & GPFs?

- **Detect hidden faults and tampering.** Faults in DPFs may occur internally without visible damage; filters may also be removed or bypassed. Such issues often go unnoticed with basic optical checks, but the PPC can reliably flag vehicles with non-functional or missing filters.
- **Prevent excessive emissions.** Vehicles with degraded or absent DPFs can emit particle counts many times above legal or type-approval limits. Verifying DPF status helps ensure emission levels stay within compliance.
- **Stay ahead of legislation.** Many regions are strengthening rules to prevent tampering with emission control systems. Compliance checks are becoming mandatory, and non-conformance can result in penalties.
- **Protect financial interests.** For fleet operators, inspection stations, and dealerships, early detection avoids costly repairs, warranty claims, and legal liability.
- **Demonstrate environmental responsibility.** Maintaining effective filters means cleaner air, lower health risks, and a better public image for companies maintaining vehicles.
- **Support audit and reporting.** Detailed verification results provide documentation for regulatory bodies, insurers, or customers requiring proof of emissions control integrity.

In Finland, new legislation effective June 1, 2024 makes it illegal to tamper with or disable emission-control systems. A faulty or removed filter can represent a significant financial risk, with repair costs sometimes reaching thousands of euros. With the Pegasor PPC, sellers, service providers, and inspection stations have a proven tool to verify filter status, reduce warranty disputes, mitigate legal liability, and limit environmental harm.



## DPF & GPF Performance Testing

Pegasor Particle Counter (PPC) is a robust, user-friendly device for verifying the condition of diesel and gasoline particulate filters in both light- and heavy-duty vehicles. The PPC is already in widespread use across Europe in countries where particle-number (PN) testing is mandatory during periodic vehicle inspections (PTI/MOT). It is officially approved for inspection use in Germany, the Netherlands, Belgium, and Switzerland.

### Key features

- **Patented electrical measurement technology.** Fast, accurate readings in 20–30 seconds of idle exhaust sampling.
- **Instant & traceable results.** Displayed on a PC or tablet; saved or printed in PDF format.
- **Wide dynamic range.** Accurately detects both clean conditions (functional filter, ambient air) and high-concentration raw exhaust.
- **Flexible probe options.** Available with 2 m or 4 m sampling probes, compatible with light- and heavy-duty vehicles.
- **Low-maintenance, continuous operation.** Designed for frequent use; Pegasor offers calibration and expert support to maintain performance.
- **Dual-filter support: Diesel & Gasoline.** The PPC is uniquely capable of verifying both diesel particulate filters (DPFs) and gasoline particulate filters (GPFs). Many other systems are designed primarily for one engine fuel type or filter type; the PPC covers both, making it a more versatile choice for inspection stations, fleets, and vehicle service providers.

### Pegasor Particle Counter

- Measures PN, LDSA, PM, and particle size in a single system
- Plug-and-play, easy operation
- Operated via PC or tablet
- Connectivity: Bluetooth, RS-232, USB, Ethernet (optional)
- Flow-through design ensures long operation without clogging
- Certified by NMI, PTB, and METAS for PN-PTI measurements
- Repeatable and reproducible results
- Supplied with calibration certificate and two-year warranty





**Expertise in ultrafine particle detection technologies.**

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.

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