

Compact

Light-weight

Energy efficient

On-board PN measurement for real-world results

The OBS-ONE PN unit is an on-board emissions measurement system for analyzing the solid particle number concentration within the specified particle size range under real-world driving conditions. The unit uses a condensation particle counter which is recommended principle by the Particle Measurement Programme (PMP), one of working groups affiliated with UNECE.

The PN unit combines with the GAS unit to measure the specified exhaust gas components, along with the exhaust gas flow rate, the GPS position, and the atmospheric conditions (temperature, humidity, pressure).



Certification to the draft regulation as currently understood

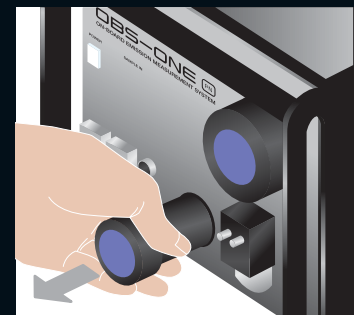
Meeting the requirements of the Euro 6 draft regulation (RDE mandatory certification starting Sep. 2017)

R&D

Compare in-lab test results with real-road test results

Feature

- Compact dimensions realized by the optimized volatile particle remover and modified CPC.
- Isopropyl alcohol as the working fluid : safely and conveniently used by saturation of a small cartridge during test preparation - no reservoir required
- User-friendly design mounts easily on any vehicle



Cartridge type

Integrated Operating Platform



HORIBA ONE PLATFORM

The OBS-ONE and other HORIBA ONE series systems employ a common user interface with future expandability. Control, monitoring and management of each emission measurement device and each module unit of OBS-ONE series can be integrated into a single controller.

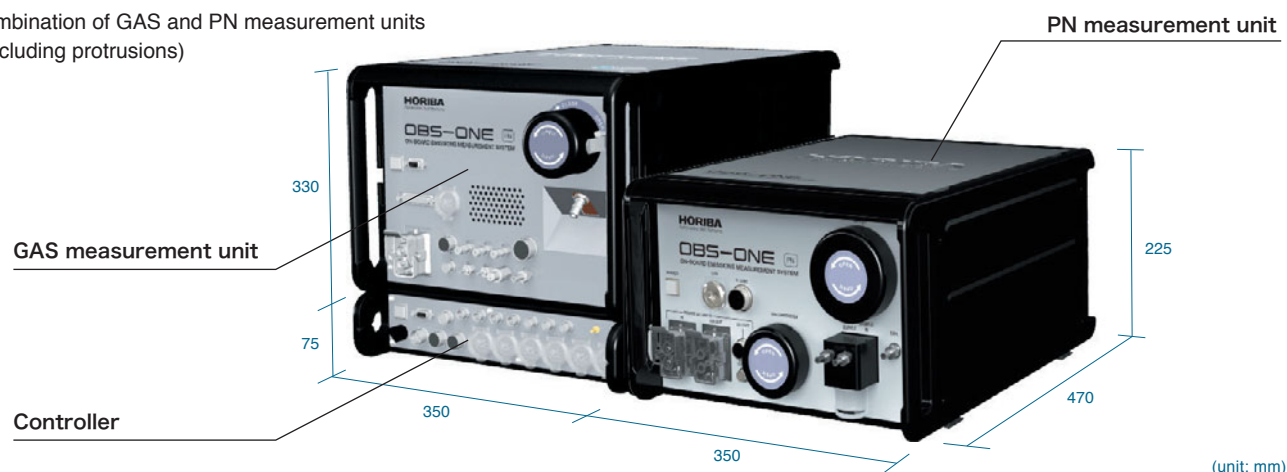


Specifications of PN measurement system

Measuring Principles	Condensation particle counter (CPC)
Particle Diameter	23 ~ 1,000 nm
Measuring Range	0 ~ 5 × 10 ⁷ particles/cm ³
Power Supply	DC 24 V
Power Consumption (MAX.)	Approx. 0.25 kW
Mass	Approx. 18 kg
Operating Condition	Temperature: -10 ~ 40 °C, Altitude: 0 to 2,000 m above sea level, Relative humidity: less than 80% (No condensation)
Condensation fluid	Isopropyl alcohol a special grade reagent (99.5%) corresponded
Option	Outer cover for mounting outside the vehicle using a hitch carrier

Dimensions and system configurations

Combination of GAS and PN measurement units
(Excluding protrusions)



The HORIBA Group adopts IMS (Integrated Management System) which integrates Quality Management System ISO9001, Environmental Management System ISO14001, and Occupational Health and Safety Management System OHSAS18001. We have now integrated Business Continuity Management System ISO22301 in order to provide our products and services in a stable manner, even in emergencies.



Please read the operation manual before using this product to assure safe and proper handling of the product.

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