

ENGINE EXHAUST CONDENSATION PARTICLE COUNTER 3790A

SKU: 3790A

Counting particles emitted from engines is valuable in engine emissions research, and is a critical component in engine type certification according to the Particle Measurement Programme (PMP). The TSI Engine Exhaust Condensation Particle Counter (EECPC) Model 3790A is designed specifically for these needs and satisfies UNECE R83 requirements and is a very valuable tool for any customer who needs to measure particles in engine exhaust.



PRODUCT DETAILS

The EECPC 3790A fully meets all proposed PMP requirements for Euro 5 and Euro 6 (VI) regulations for light and heavy-duty vehicles. It builds upon the proven rugged, reliable, and highly repeatable performance of TSI's butanol CPC technology. The full-flow design incorporates new improvement and performance features, such

as anti-spill/anti-flooding design, condensate removal system, and removable saturator for easy maintenance. EECPC 3790A has a lower particle size detection limit (D_{50}) of 23 nm to meet the PMP's requirement for eliminating measurement of volatile and semi-volatile nanoparticles formed by nucleation of gaseous compounds.

APPLICATIONS

- Diesel and gasoline engine emissions testing

INCLUDED ITEMS

- Aerosol Instrument Manager® software

FEATURES & BENEFITS

- Meets the PMP lower particle size detection limit at the defined D_{10} , D_{25} , D_{50} and D_{90} particle sizes
- Achieves a linear response to particle concentration from 1 to 10,000 particles/ cm^3 with $R^2 > 0.95$
- Achieves a counting accuracy of $\pm 10\%$ against a traceable standard
- Operates under full flow conditions using single particle counting
- Calibration is in full compliance with PMP
- Achieves readability of 0.1 particles/ cm^3
- Internal pulse-height monitor to indicate measurement quality
- 10 Hz data rate for modal analysis