particle Counter

3DATX introduces the newcomer to the parSYNC® Series Family – parSYNC® PC (Particle Counter)



Recent developments by the European Union have demanded increasingly accurate and robust equipment, capable of providing nanoparticle measurements. Specifically, the EU has focused on the benefits of a Particle Count output, based on a Portable Emissions Measurement System (PEMS) platform.

A PEMS platform approach for Particle Count is a logical next step; the use of PEMS have become more standardized and relied-upon by governmental agencies due to the advantages of in-use performance of vehicle testing over that of traditional laboratory testing. PEMS have a significant advantage in that they are designed to measure emissions during actual on-road use of all internal combustion engines – petrol, diesel, or LNG/CNG.



TECHNICAL INFORMATION

DETAILS	DATA
particle size	10 to 70,000 nm = 0.01 to 70 μm
optimal particle size range	Coarse 18,000 to 70,000 nm = 18 to 70 µm Medium 4,000 to 20,000 nm = 4 to 20 µm Fine 10 to 5,000 nm = 0.01 to 5 µm
average particle size ranges	10 to 300 nm = 0.01 to 0.30 µm
power supply	12 V Lithium Ion Polymer battery
power consumption	lamp
dimensions	12 cmhx 22 cmwx 13 cmd
weight	3.7 kg

The 3DATX patented multi-plex particle sensor system - parSYNC® PC - provides the ability to capture multiple, dissimilar "images" of particles using the parSYNC® PC LabVIEW®-based software to provide multiple outputs: standard Opacity, Scattering and Ionization, in addition to surrogate outputs for Particle Count (PC/PN), and Particulate Mass (PM).

The advantage is that all these data can be re-examined and reprocessed many months – or years – after a test has been completed; in effect, providing a 'future-proofing' advantage which is superior to all other particle testing devices on today's market.



3DATX parSYNC® "integrated" PEMS (iPEMS) provide unique, hot-swap cartridges that deliver mass emissions – all in one compact 3.7kg unit (including batteries).

Some fuel types will require sample conditioning (heating or water removal).

The parSYNC® Series of devices are powered by a common software interface, which provides a flexible and adaptable solution to each unique transportation challenge presented.

WE MAKE TRANSPORTATION DECISIONS EASY