

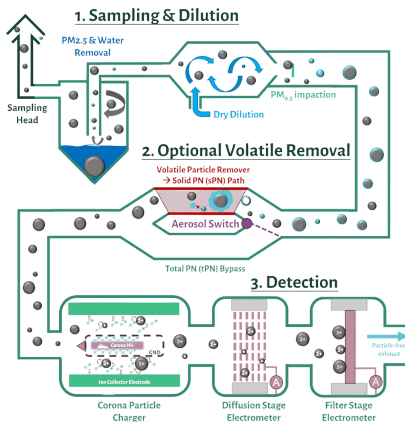
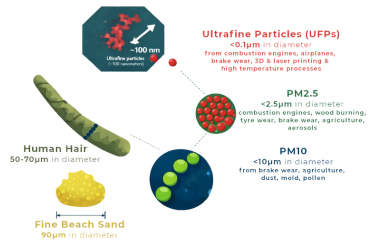
NANO DUST AIRPN10

Plug & Play Ultrafine Particle Monitoring



What is it about?

Hazardous ultrafine particles (UFPs) are 100 times smaller than conventionally monitored $PM_{2.5}$ pollutants of ambient air. These nanoparticles are required to be measured by the new EU Air Quality Directive 2024/2881 and are part of work safety considerations and immission inventories of factories and infrastructures.



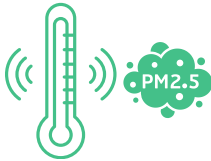
How does it work?

The AirPN10 is an easy-to-use measurement tool based on an advanced 2-stage diffusion charging detection technology. By first charging and then, electrically detecting nanoparticles with ultrasensitive electrometers, the device provides information on the concentration, sizes (and optionally volatility) of the aerosol. The weather-proof enclosure, the built-in sampling system allow for direct inside and outside deployment in the field.

APPLICATIONS



Simple to Mount on Post



Extendable by PM₁, PM_{2.5}, T & rH Sensors



IP55 Weather-Proof



Connected to Cloud



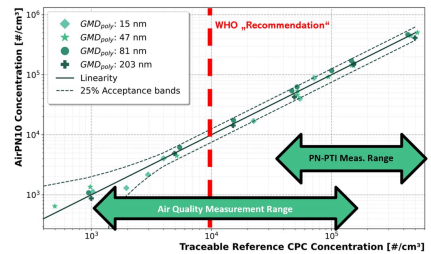
Magnetically Attached Tablet UI

Specification

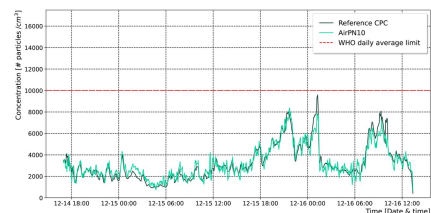
Measured Quantities	Solid and/or Total Particle Number Concentration (SPN/TPN) Geometric Mean Diameter (GMD)
Measurement Range	1.000 - 500.000 #/cm ³
Size Sensitivity	10 - 300 nm (extension option to 2.5µm)
Accuracy	25% or 1.500 #/ccm
Volatile Particle Removal	Evaporation Tube (only SPN path)
Calibration Aerosol	Soot (ISO 17025 on request)
Operating Conditions	-10°C to 40°C, <90% Humidity
Weight	< 9kg
Power	100-230 VAC, 50-60Hz, < 150W
Dimensions (WxDxH)	~ 480 mm x 280 mm x 270 mm

Rental & Full Service options available.

Performance



Size-dependent linearity against traceable reference CPC



Comparison of ambient UFP measured with the AirPNI0 and a reference CPC