



Product data sheet

naneos partector 2 nanoparticle detector



Applications

- Aerosol Science
- Environmental and climate studies
- Inhalation studies
- Indoor and work place environments

Benefits

- miniature and lightweight
- hassle-free measurement
- fast startup time
- works in any orientation
- wide particle concentration range
- 3 meaningful metrics
- great battery life

Description

The naneos partector 2 is the world's smallest multimetric nanoparticle detector. The partector 2 uses dual non-contact detection stages to measure not only lung-deposited surface area like the standard partector, but also particle number concentration and average particle diameter.

The key benefits of the partector 2 compared to traditional nanoparticle detectors, such as handheld CPCs, are:

- multiple meaningful metrics
- miniature and lightweight
- hassle-free measurement
- fast startup time
- works in any orientation
- wide particle concentration range
- great battery life

The partector comes in a rugged transport case that contains all accessories necessary:

Protective sleeve - protects the partector from dirt, water and shocks, and contains a belt loop to attach it to a belt for personal monitoring.

Micro-SD-card to USB adapter - to easily read data from the partector's integrated micro-SD-card.

USB charger - a standalone USB charger to either charge the partector or run it 24/7 indefinitely

Optional

In addition to the standard accessories, the following optional accessories are available

- External battery pack: use any USB battery pack to extend the battery life of the partector
- Decentlab data link: Transmits partector data to an internet server so you can view and download your data online immediately.
- External alarm kit with a 90 dB loudspeaker - to make sure that everyone hears when the partector alarm triggers, even in loud workplaces.

Custom

Naneos can customize the partector to make sure it fits your needs perfectly. Some examples of customizations:

External pump: for long-term 24/7 monitoring, Naneos provides an OEM version without internal pump, so that you can either connect your own pump or use an external pump that Naneos provides. Larger external pumps have longer lifetimes than the miniature pump in the partector.

Higher time resolution: at higher internal flow rates (with the external pump), the partector can operate with higher time resolution.

Specifications

- Simultaneous measurement of 3 metrics: LDSA, particle number, and average particle size
- High time resolution: 1 second
- LDSA concentration range: from 0-12'000 $\mu\text{m}^2/\text{cm}^3$
- Number concentration range: from 500 - 10^6 cm^{-3}
- Average particle diameter range: from 10-300 nm
- Typical accuracy: 30%
- Size: 142x88x34mm
- Weight: 450 grams
- Internal rechargeable Li:Ion battery, run time typically 20 hours in new devices
- Data storage on a μSD -card (enough space for many years of data!)
- Graphical display