

APMON Industrial



Advanced Particle Deposition Monitoring



Monitoring particle events



Real-time logging & Contamination alarms



Controlled environment and cleanroom



Real-time monitoring events. Increase yield through insights

Even with the best precautions in cleanrooms, particles of $\geq 20 \mu\text{m}$ deposit on surfaces that should remain clean. Smaller particles are removed by airflow systems, however $\geq 20 \mu\text{m}$ particles can only be removed by cleaning.

The main goal of cleanrooms is to protect vulnerable products against particle deposition. In order to increase yield, it is necessary to make products less vulnerable or take measurements to lower the Particle Deposition Rate (PDR). Insights in human behavior, cleaning and clothing are essential to take contamination control to the next step.

The Advanced Particle deposition MONitoring system (APMON) is the first and only system that is able to measure the deposition of these particles in real time. Every ten minutes the APMON informs the user on their local situation. This way the APMON helps the user to gain insight in incidents and get in control of particle deposition.

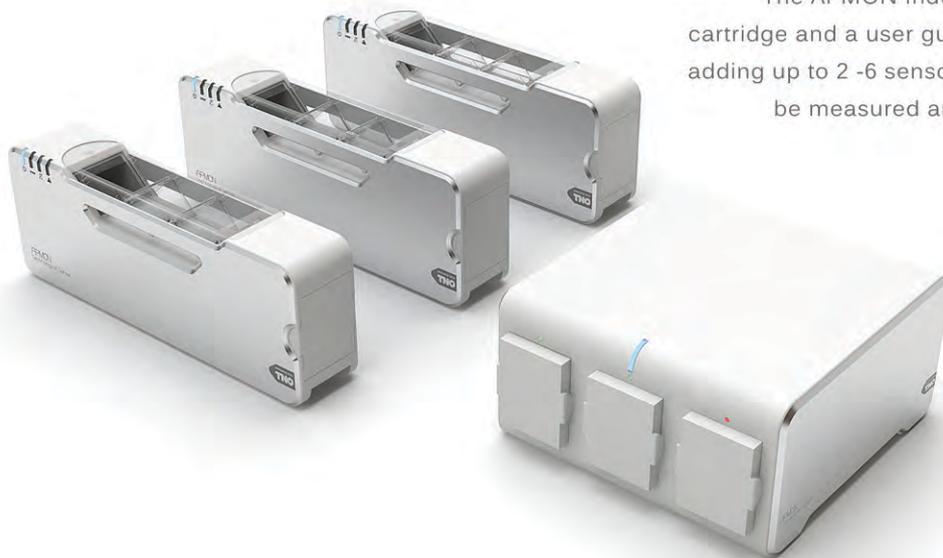
Advantages of the APMON

- o Monitoring operation quality of the cleanroom
 - Investigate local cleanroom quality
 - Determine events of (higher) particle deposition
- o Evaluate the effect of control measures
 - Cleaning
 - Clothing
 - Behavior
- o Risk assessment during product exposure.
- o Improve working methods with respect to the product.
- o Determine the impact of measures to improve local cleanliness.
- o Determination of cleaning frequency
- o Create awareness of personnel



The APMON Industrial consists of a sensor, a base unit, software, cartridge and a user guide. It can be adjusted to individual situations by adding up to 2-6 sensors per base unit. This way multiple locations can be measured and the data can be displayed in a clear overview.

Simple, easy and effective.



TNO innovation for life

The APMON is developed in association with TNO, the Dutch Central Organization for Applied Scientific Research. The APMON measures the particle deposition rate (PDR) as intended in ISO 14644-3 Annex B11.2.2.



Remote Access



Auto Report



Large Surface Area



Wireless



Battery > 5 days



Real-time & 24/7



Cartridge \leq 3 months