



*Hygienic & Clean
Air Sampler*



Application Note **EN
code i002**

**HEPA filter
location**

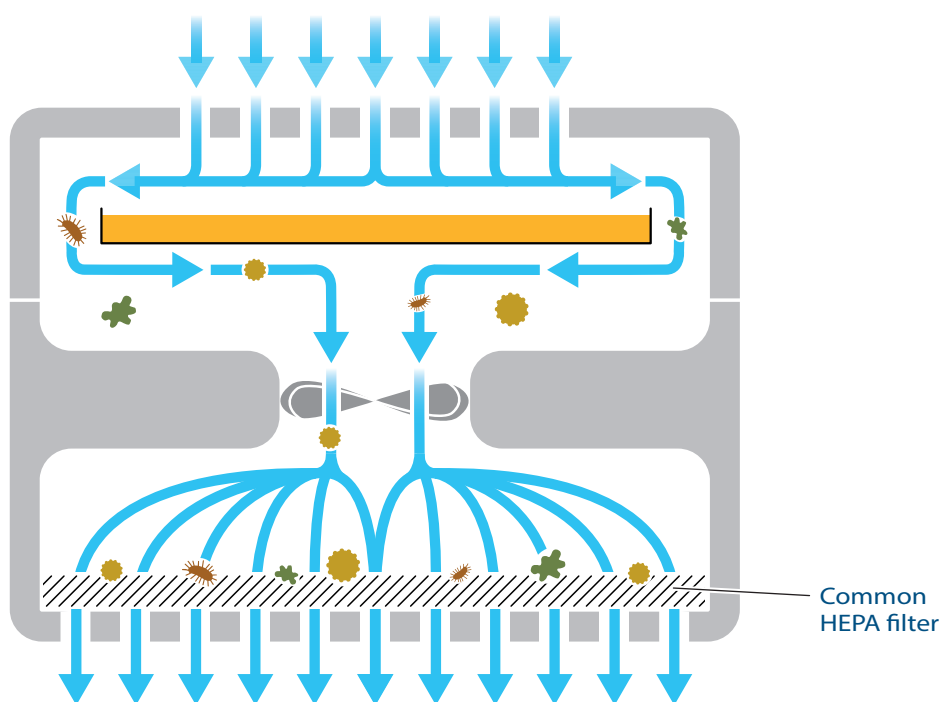
rel. 01 - 06/2021

In some specific application it is required to have an HEPA filter at the air outlet of the air sampler.

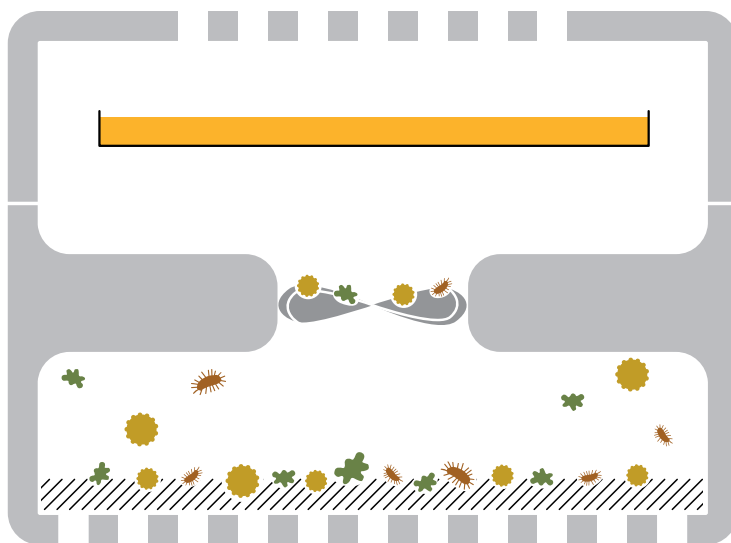
This filter will ensure than no aspirated particles will be then emitted by the air sampler.

This application note will explain where the HEPA filter must be located to reduce the contamination risk.

Once bacteria are trapped inside a standard filter, they will grow and will contaminate all the surrounding environment. A possible leakage or damage of the HEPA filter will become a potential source of contamination (*see the picture below*).



After a few days...



✗ CONTAMINATION RISK !

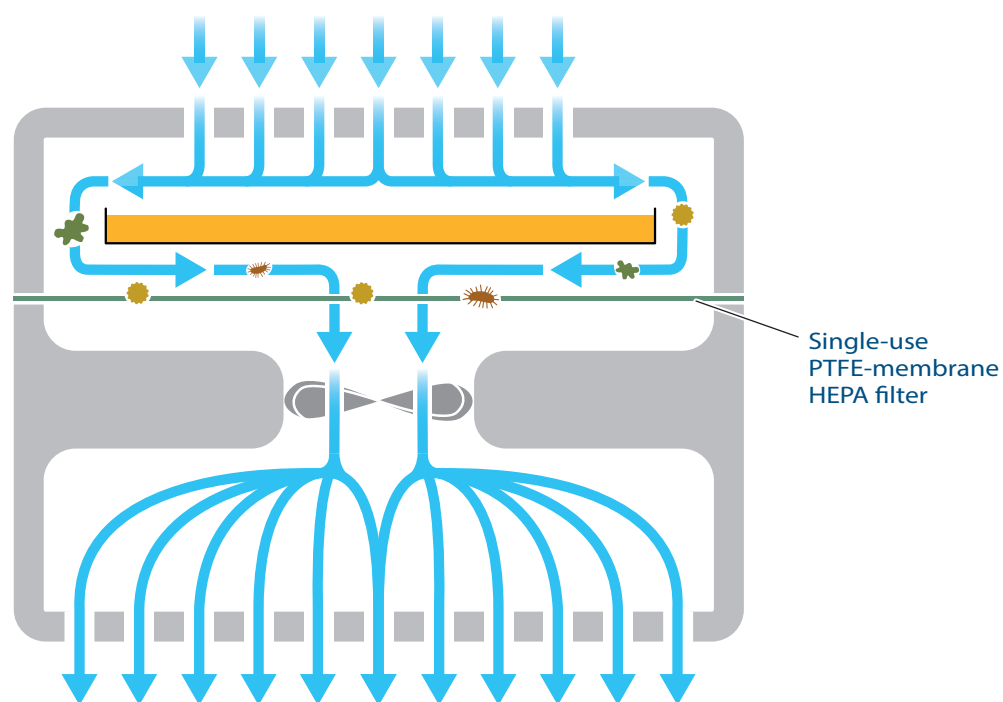
In this situation the contamination risk is very high, a simple filter leakage will cause a lot of troubles.

With the aim of risk reduction it will be instead created a tremendous bacteria carrier !

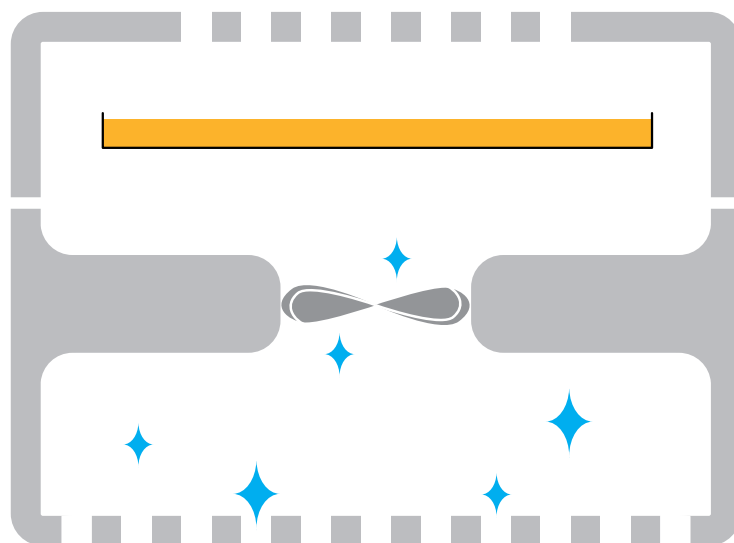
Choosing an appropriate position to locate the HEPA filter can fully eliminate this risk.

Consider placing the HEPA filter **before** and **not** after the aspirating motorfan.

In this way no bacteria can go inside the fan housing, they all will be blocked by the HEPA filter and all the environment after the filter will remain clean (*see picture below*).

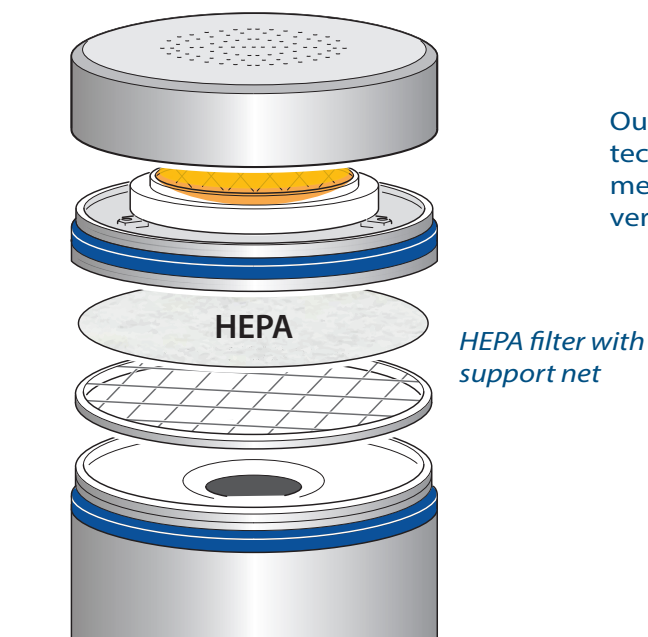


After a few days...



✓ **CLEAN INSTRUMENT**

The common HEPA filter are made of fiberglass and has the typical folded shape.



Our filters are based on a new, different technology. They are made of a PTFE-membrane and they can be manufactured in very thin foil.

Due to this, it is possible to realize a filter that can be easily installed by the user, a single use filter that can be replaced at the end of each sampling process. A filter of this kind can eliminate any contamination risk maintaining the instrument clean.