

MicroBio Air Sampler - Air disturbance

All devices that move air from one steady set of conditions will cause air disturbance to varying degrees.

MicroBio Air Sampler Design

The MicroBio air sampler is a sieve impaction class device. Air is exhausted perpendicular to the inlet at a higher velocity to the inlet to minimise re-aspiration. Slow exhaust air can more easily be re-aspirated by the sieve impaction head that can result in low particle collections on the sample media, as particles from that air would have already been sampled.

Caution in Use

When using the MicroBio air sampler (or any type of air sampler) in controlled air flow environments consideration must be taken on the siting of the sampler and the sampler model to reduce the effects of the exhaust on air flow or on processes adjacent to the sampler.

If the MicroBio is to be used in isolator cabinets, the MicroBio MB1 or MicroBio MB2-RSH models are advised, and these are placed on the work surface of the isolator with the exhaust pointing unobstructed towards the air extraction within the cabinet.

If the air of the sampler must exhaust in the direction of air flow within the test environment, the air sampler sieve impaction head should be perpendicular to the flow with the exhaust pointing towards the direction of flow. The MicroBio MB2 sampler is recommended for this using a tripod.

MicroBio air samplers have been tested in all orientations, as part of a UK DTI validation programme, to show the same collection performance.

Special Adaptation

Cantium Scientific is able to design and manufacture adaptations to the MicroBio sampler models to suit customer requirements for special applications, such as exhaust diffusion ducts and inlet screening for fast air flow environments.

Disclaimer

Cantium Scientific Limited has no control of the operation of the products at customer facilities. It is the customer's responsibility to determine the suitability of the MicroBio air sampler to their application.