



LSE
MONITORS

Multipoint Sampler for NH₃

custom-built solution

A new solution for air pollution monitoring

In order to extract sample gas from multiple points and transport it to an LSE NH₃ analyzer, LSE Monitors has developed a multipoint sampler for measuring NH₃ in ambient air.

The multipoint sampler and the gas connections between the sample points and the analyzer are custom-built for an optimum solution for the customer.



below: standard version
of multipoint sampler



Sampling with NH₃

Because of the sticky nature of NH₃ on all kind of materials, it is inherently challenging to sample NH₃ from multiple sample points and inject the sample gas into one analyzer.

Coatings and choice of material

The multipoint sampler (15 channels) for NH₃ is equipped with coated couplings, a coated switching valve and the internal tubing material is made from PFA.

Continuous sampling

By continuously flushing all the connected sampling lines, the residual sticking effects of NH₃ are minimized. Eventually, the residual sticking effects of NH₃ will define the minimum required sampling time per sample point.

System design

The pump capacity, tubing length and tubing diameter of the multipoint sampler must be designed according to the specific needs of the customer. Important parameters are: distance between sample point and analyzer and acceptable minimum pressure at the sample inlet of the analyzer.

Furthermore, the dust load and humidity of the sample gas might imply extra demands on the complete system. Therefore the details must be discussed with LSE in order to be able to provide the best possible solution.