

PEN Portable Electronic Nose

Intelligent chemical Sensor

PEN2 is our small, fast and robust identification system for gases and gas mixtures. The detection of the gases is performed with an array of gas sensors.

Single compounds or mixtures of gases can be identified after a training step by using the pattern generated by the sensors. The instrument provides a fast and easy answer like "good" or "bad", "yes" or "no" - depending on the needs of the user.

Because of its particular sampling strategy our detector can be operated in the laboratory, or in mobile applications in the environment as well as online for process control applications.



- Small, Fast and Robust
- Sensitive Sensors
- Online Sampling Technique
- Patented A3-Technology:
Automatic Ranging
Automatic Calibration
Automatic Enrichment (opt.)

Options for PEN2 and i-PEN

Headspace-Sampler:

The PEN-Systems can be connected to headspace samplers from different suppliers. Please contact Airsense for more information about manufacturers of headspace samplers.

Headspace Probe:

A low cost alternative using a manual headspace technique is often also possible. For this purpose a manual headspace probe was developed. Huge samples, which will not fit in the usual 20 or 40ml vials for the headspace samplers, can also be analyzed.

After a signal from the Winmuster Software, which controls the e-nose, the septa can be perforated with the manual probe.

An electrical contact is then closed, which is used for starting the measurement.

The manual probe, as well as the automatic headspace samplers, can be also used in combination with the enrichment unit EDU and the PEN.

Zero Gas

Zero gas is the reference gas which is normally required when working with electronic noses. For some applications it is only necessary to use a charcoal filter, sometimes it is better to use a zero gas generator. Different zero gas generators are available. Please contact Airsense for further information.

Please contact **INGENIERIA ANALITICA** for further information on options, e.g. zero-gas generators or consumables, e.g. charcoal filters, vials, septa, etc.