

Product data sheet

VialArch™ module

Headspace gas module for non-destructive measurements of parenteral pharmaceutical packaging.

The VialArch sensor module is a completely non-destructive and non-intrusive inspection sensor for headspace analysis of parenteral packaging such as vials and ampoules.

The VialArch can measure oxygen in:

- Tubular vials
- Molded vials
- Amber vials
- Plastic vials
- Ampoules
- Bottles

The VialArch is based on Tunable Diode Laser Absorption Spectroscopy (TDLAS). It can be used as HeadSpace Analysis (HSA) and Container Closure Integrity Testing (CCIT) and intended for integration into in-line inspection- or production lines for 100 % testing and quality control.

Gasporox concept



Gasporox VialArch is delivered with Gasporox measurement concept meaning we work with you to ensure best performance, so the below specification is made general as the VialArch will be custom modified to perfectly fit your inspection- and production line.

Benefits

- Residual oxygen measurement
- Non-intrusive and non-destructive
- Accurate
- Robust
- No external triggering needed
- No nitrogen purging needed
- Easy to integrate
- Small footprint on the production line



Gas:	O ₂ , H ₂ O Total Pressure	Temperature	+15 to +25 °C
Measuring technique:	TDLAS – Tunable Diode Laser Absorption Spectroscopy	Communication interfaces:	Serial RS422 Digital outputs
Measurement range:	0-100% O ₂ 50-1000 mbar H ₂ O	Housing:	Arch: aluminum or stainless steel Electronic box: stainless steel
Measurement speeds:	Up to 600 vials/min Minimum gap between vials 5mm	Arch (HxWxD):	90 mm x 170 mm x 70 mm, 1 kg (aluminium), 2.5 kg (stainless steel)
Vial container criteria:	Minimum vial size 2R Maximum vial size 100R	Electronic box (HxWxD):	100 mm x 200 mm x 200 mm 2 kg
Precision and accuracy:	Depending on speed, concentration, and vial diameter	Power supply:	18-30 V DC
Infrared laser	Class 1 according to IEC 60825-1 760 nm wavelength O ₂ 1383 nm wavelength H ₂ O	Approvals:	IP Classification IP64 for the Arch and IP54 for electronics box. CE-marked according to: - EMC 2014/30/EU, - Low Voltage Directive 2014/35/EU