

VialArch™

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

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.



Benefits

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



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.

Specifications			
Gas:	O ₂	H ₂ O	Input power: 24V/2A DC, range 18 - 30V DC
Measurement range:	0 – 100%	10 – 1050 mbar Total pressure, 0 – 25 mbar Partial pressure	Measuring technique: HSA/TDLAS - Tunable Diode Laser Absorption Spectroscopy
Typical Accuracy:	0.2% O ₂ at 300 mm/s		Vial container criteria: 2 – 100R
Typical Precision:	0.1% O ₂ at 300 mm/s		Measurement performance: The measurement performance is highly dependent on the application parameters
Infrared laser:	Class 1 according to IEC 60825-1 760 nm, <2.5 mW 1400 nm, <10mW		Vial pitch: Minimum 1 vial diameter gap at 600 vials/min
Electronic box:	Stainless steel 90 mm x 200 mm x 200 mm 2,5 kg IP54		Approvals: CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU
Arch:	Aluminum anodized 90 mm x 170 mm x 70 mm 1.0 kg IP65		Communication interfaces: Input/output communication Digital output
Measurement speed:	Up to 600 vials/min		Serial RS422, USB Digital I/O, 0 - 24V (sinking type)