## $\mathsf{VialArch}^{\scriptscriptstyle\mathsf{TM}}$

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:

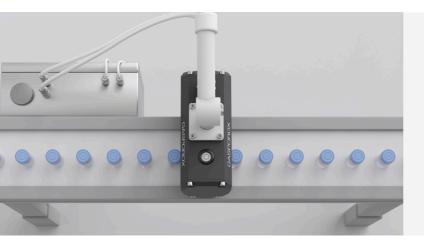
- Tubular vials
- Molded vials
- Amber vials
- · Plastic vials
- Ampoules

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 nondestructive
- 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 <sub>2</sub>	H <sub>2</sub> O	Input power:	24V/2A DC, range 18 - 30V DC
Measurement range:	0 – 100%, 0 – Ambient partial pressure ingress air	10 – 1050 mbar Total pressure, 0 – 25 mbar Partial pressure	Measuring techique:	HSA/TDLAS - Tunable Diode Laser Absorption Spectrocopy
Typical Accuracy:	0.2% O <sub>2</sub> at 300 mm/s		Vial container criteria:	2 – 100R
Typical Precision:	0.1% O <sub>2</sub> 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	Serial RS422, USB Digital I/O, 0 - 24V (sinking type)
Measurement speed:	Up to 600 vials/min			

