



## HIGHLIGHTS

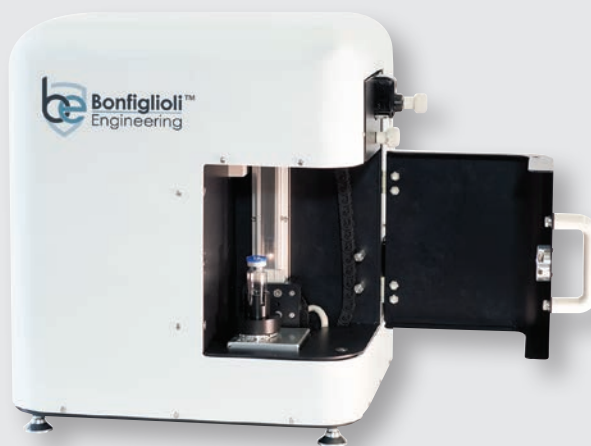


- Double path system
- Nitrogen purging not required
- Automatic height adjustment
- HMI real-time display of statistics and raw data

# LASERCUBE

## Benchtop Headspace Gas Analyzer

Lasercube is a benchtop instrument conceived for performing the Headspace Gas Analysis (HGA) of sterile pharmaceutical containers. Fully automated test cycle sequencing with manual loading and unloading of containers.



## TECHNICAL FEATURES



**Container Application:** Ampoules, Vials, Cartridges, Pre-filled Syringes

**Products:** Freeze dried, Liquid, Powder

**Container Dimensions:** Ø [10 - 69] mm

**Speed:** 4 cpm (max)

**Technology:** Tunable Diode Laser Absorption Spectroscopy (TDLAS)

**Inspection Features:** Non-Intrusive, Non-Destructive Laser-based Inspection Method

**Inspection Capabilities:** Oxygen/Moisture/Carbon Dioxide level, Absolute Pressure value

## ADDITIONAL BENEFITS



- Etalon effect **negligible**
- No reference container required
- **Extreme stability** and **accuracy** even with limited headspace
- **Automatic spinning** plate for complete container rotation
- **Lightweight**
- **Fast**, reliable and **repeatable** results
- **Cost-effective** solution with low power consumption

## TECHNOLOGY



HGA inspection process based on Tunable Diode Laser Absorption Spectroscopy (**TDLAS**) method to accurately quantify gaseous concentration levels.

Diode laser beam transmitted through headspace region of the container and reflected back towards the receiver.

Lasercube sensors measure the laser beam absorption related to target gas concentration.

## QUALITY ASSURANCE



- Software designed to comply with **FDA 21 CFR Part 11** and **EU Annex 11**
- Testing method in conformity with provisions of **USP – United States Pharmacopeia – General Chapter <1207>**
- **Standard containers set** supplied for easy calibration and verification
- **Easy to perform validations** and qualifications thanks to advanced protocols and documentation