

**INFORMATION**  
FINAL PACKAGE ANALYSIS  
TOTAL PACKAGE ANALYSER  
ORBISPHERE 6110



# Final product quality control

ORBISPHERE 6110 total package analyser



UNITED FOR WATER QUALITY

# Total package analyser for Oxygen & Carbon Dioxide measurements

The ORBISPHERE 6110 total package analyser is the latest technology in final package analysis for gas measurements. It has been designed to meet the practical needs of the at-line environment and to deliver a simple, high-quality user interface.

This automatic analyser provides oxygen and carbon dioxide values for both headspace and liquid phase in bottles or cans. Automatic operation, self-validation and at-line ergonomics result in an exceptional tool for final product quality control.

→ **At-line ergonomics – simple, effective, time saving**

→ **Data confidence – protected, audited, validated**

→ **Return on your investment – low cost of ownership**

## Key benefits

### Productivity / Performance

- At line, saves time and ensures rapid response for process
- From bottle to can without accessories
- Fast measurement time

### Ease of use

- No sample preparation
- Piercing location spot
- One push button operation

### Safety

- Protection shield
- Automatic rim detection
- Emergency stop button

### Comfort

- Optimal touch screen position
- Sample position accessible from both sides
- Menu Wizard, facilitates set-up and service operations

### Design

- One enclosure
- Easy access to data transfer options



### Data confidence

- Data confidence is driven in two ways:
- The OBISPHERE 6110 incorporates self-calibration and self-validation functions to ensure continuous reliability of measurement.
  - Stored data or data retrieved through LIMS/OPC are traceable with an independent audit trail.
  - Multilevel operations access is provided with password protection.

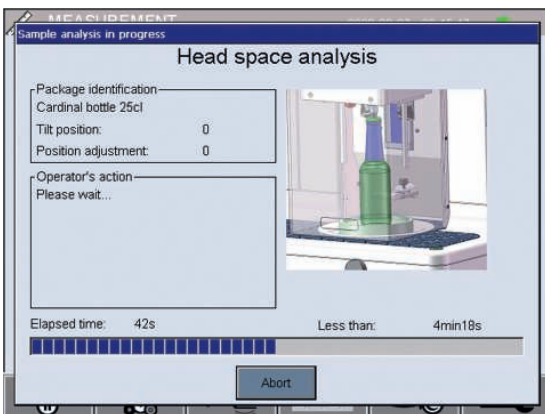
### Low cost of ownership

- The ORBISPHERE 6110 delivers ROI from day one:
- At-line operation means immediate response to process changes or out of spec results.
  - Low cost per analysis ensures operating costs are low.
  - Minimum maintenance, due to gas phase measurement and robust design.
  - Maximum uptime with self checks conducted between analysis cycles.

### Principle of measurement

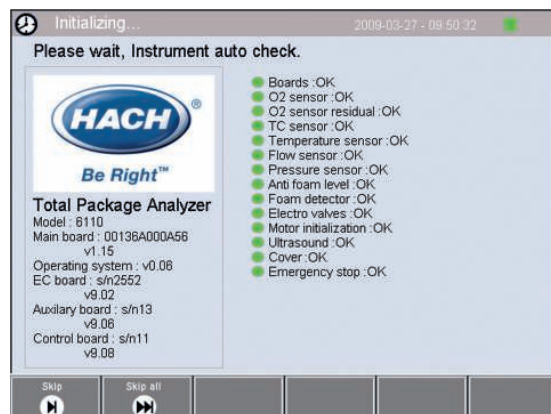
- Total package analysis is achieved in a fully automated 5 step process:
- Package piercing
  - Headspace O<sub>2</sub> measurement
  - Liquid O<sub>2</sub> and CO<sub>2</sub> measurement
  - Headspace volume determination
  - End of analysis, system returns to stand-by safe mode
- The patented Controlled Gas Extraction process eliminates liquid sampling and system cleaning minimising maintenance and ensuring consistent operation.

### An interface for every user



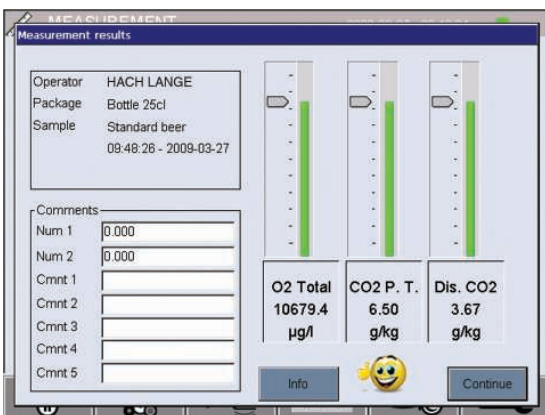
### Sample analysis status

Real time status of sample process means the operator can focus on the filling management.



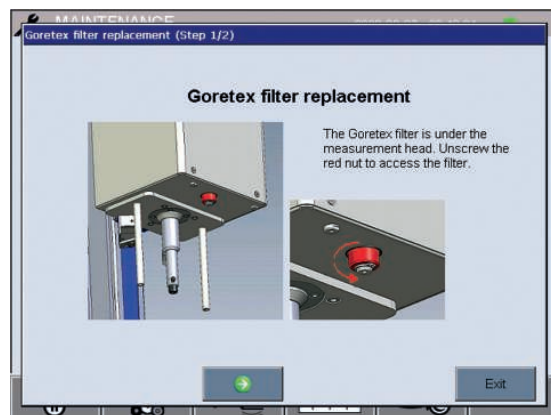
### Self check system

Internal diagnostics confirm the analyser is working correctly at start up or when requested.



### Visualise and analyse

Results can be viewed in table or dashboard mode with space for operator comments.



### Menu Wizard

Wizard guides the operator through set up and maintenance steps.

# Technical data

<b>Analysis</b>	Operating range	O <sub>2</sub> 1 ppb – 20 ppm CO <sub>2</sub> 0.75–5 v/v or 1.5–10 g/kg	
	Repeatability, r <sup>95</sup> (at 20 ±5 °C)	TPO* ±5 µg/l ±10 % whichever the greater CO <sub>2</sub> ±0.05 v/v or 0.10 g/kg ±2 % whichever the greater	
	Typical analysis time	About 4 minutes	
	Typical sample throughput	12 samples / hour	
	Display units	O <sub>2</sub> concentration: ppb, ppm CO <sub>2</sub> concentration: v/v, g/kg, g/l, %W Total package quantities: mg, ml, mg/l, ml/l, µg/l Pressure: bar, mbar, psia Temperature: °F, °C, K	
	Operating limits	Package temperature: -2 to 30 °C (28 to 86 °F) Package pressure: 1.4 to 6.8 bar (20 to 73 psia) Ambient temperature: 0 to 40 °C (32 to 104 °F)	
	Package settings	Closure types: metallic, PET Maximum package height: 340 mm (13.39 inch) Minimum package height: 90 mm (3.54 inch) Minimum package volume: 150 ml	
	<b>Enclosure</b>	Dimensions (L × W × H)	537 × 540 × 942 mm (21.1 × 21.3 × 37.1 inches)
		Weight	55 kg (121 lbs)
		Enclosure protection	IP 20
Power requirements		100/240 VAC ±10 %, 50/60 Hz	
Power consumption		Max. 250 VA	
Purge gas		CO <sub>2</sub> with purity >99.9 % at 4–7 bar (58–102 psia)	
<b>Compliance</b>	European directives	Low voltage 2006/95/EC EMC 2004/108/EC	
	Electromagnetic compatibility standards	EN 61326: 2006	
	Safety standard	IEC/UL/CSA 61010-1	
	Safety of laser products	IEC/UL/CSA 60825-1	
<b>Interface</b>	Digital display	TFT VGA (640 × 480) colour touch screen	
	Operating system	Windows CE 4.2	
	Languages	English	
	Digital connections	1 × USB client, 2 × USB host, 1 × Ethernet	

TPO = Total Package Oxygen, i.e. total quantity of oxygen present in the package.  
Subject to change without notice.

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