

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 lab and at-line environments. It provides a simple, high-quality, touch-screen user interface to facilitate interaction and measurement. The analyser provides both oxygen and carbon dioxide measurement on all types and size of can or bottle resulting in a fast, clean, final package analysis. By improving process understanding through package head-space and liquid measurement, this increases process control and beverage quality.

- **At-line ergonomics – simple, effective, time saving**
- **Data confidence – protected, audited, validated**
- **Return on your investment – low cost of ownership**

Fast, effective operation

No sample preparation necessary for total package and headspace oxygen analysis.

Reliable and flexible

The analyser operates on all types & sizes of can and bottle.

Gas phase measurement

No daily, weekly or monthly sensor cleaning necessary.

Accuracy in all processes

P/T and True-CO₂ measurement at any temperature.



Minimal maintenance

The ORBISPHERE 6110 analyses beverages without removing any product from its container. Since the measurement takes place in the gas phase, there is no direct liquid contact with the oxygen or carbon dioxide sensors. This simplifies maintenance, eliminating hassles such as cleaning up liquids, bleaching tubing and valves to prevent fouling – reducing cost of ownership.

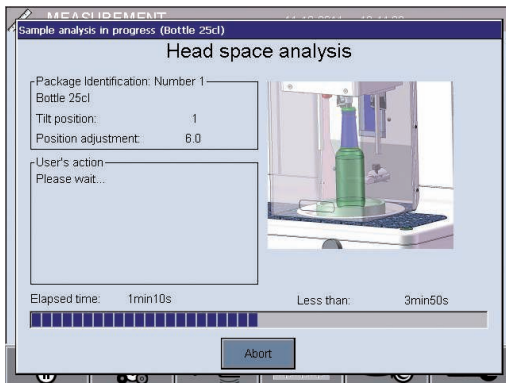
Every package, every size – no spills

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. Minimal maintenance, due to gas phase measurement and robust design. Maximum uptime with self checks conducted between analysis cycles.

Ergonomic operation

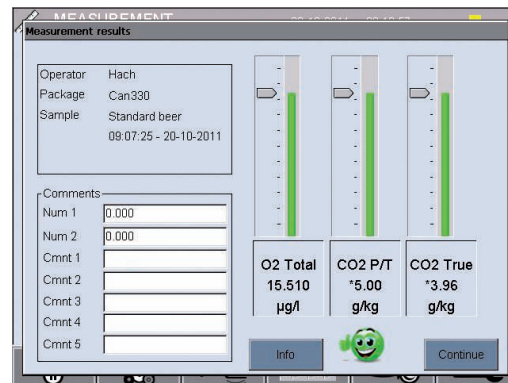
The ORBISPHERE 6110 offers repeatable analysis with minimal operator intervention. The intuitive and powerful touch screen interface ensures that measurement and analysis can be completed quickly and easily for both line operators and QA managers. When inserting a sample or a positioning aid, it confirms optimal placement. With the single push of a button, the instrument performs the analysis.

An interface for every user



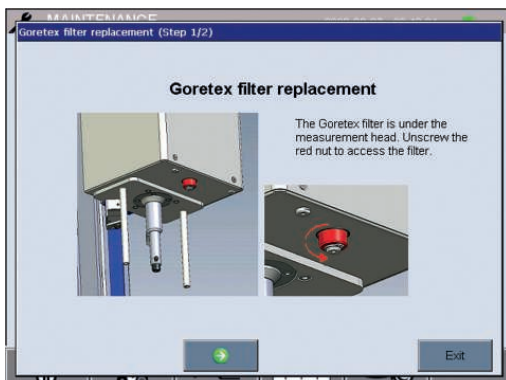
Sample analysis status

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



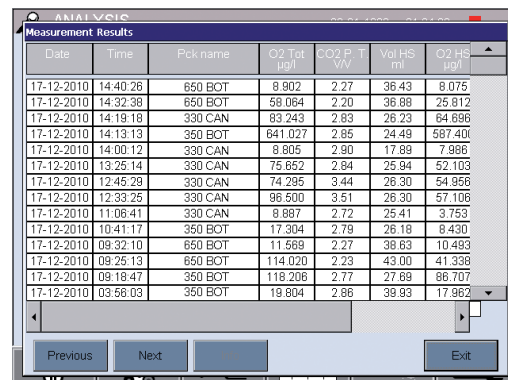
Visualise and analyse

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



Menu Wizard

The Menu Wizard guides the operator through preventative maintenance steps whilst diagnostics confirm that the analyser is working correctly.



Data access and comparison

Measurement records can be reviewed on screen and also accessed via the 6110 web server or a USB data download.

Technical data

Analysis	Operating range	O ₂ : 1 ppb – 20 ppm CO ₂ : 0.75–5 v/v or 1.5–10 g/kg
	Repeatability, r95	TPO*: ±5 µg/L ±10% whichever the greater CO ₂ : ±0.05 v/v or 0.10 g/kg ±2% whichever the greater – measured on equilibrated package at 10 to 25 °C
	Typical analysis time	About 4 minutes
	Display units	O ₂ concentration: ppb, ppm CO ₂ 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
Enclosure	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
Compliance	Purge gas	CO ₂ with purity >99.9% at 6–7 bar abs (58–102 psia)
	European directives	Low voltage 2006/95/EC; EMC 2004/108/EC
	Electromagnetic compatibility standards	EN 61326: 2006
Interface	Safety standard	IEC/UL/CSA 61010-1
	Safety of laser products	IEC/UL/CSA 60825-1
	Digital display	TFT VGA (640 × 480) colour touch screen
	Operating system	Windows CE 4.2
Order information	Languages	English, German, Spanish, Portuguese (Brazil), Japanese, Chinese
	Digital connections	1 × USB client, 1 × USB host, 1 × Ethernet
	DG6110-SYS	6110 Total Package Analyser kit including: 6110-AD2 instrument, ORBISPHERE TPA oxygen sensor, 1 year consumables kit
	33001	European power cable

HACH LANGE Services



Contact us to place an order, request information or receive technical support.



Quality assurance, complete with standard solutions, instrument checks and test solutions.



Seminars and workshops: Practical and hands on training.



On site technical support.

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

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