

# Hach Orbisphere 6110 Total Package Analyzer



## Applications

- Beverage

## Total Package analyzer for Oxygen & Carbon Dioxide measurements

The Orbisphere 6110 boasts the latest technology in final package analysis for measurements of Total Package Oxygen, Headspace Oxygen and Dissolved Oxygen; as well as dissolved Carbon Dioxide and Headspace Volume. It has been designed to meet the practical needs of both lab and at-line environments. The high-quality touch-screen facilitates measurement customization on all types and sizes of cans or bottles, as well as providing critical information on the health of the instrument. Utilization of this instrument has been proven to provide critical quality information of the final package, increasing process control and beverage quality.

### Fast, Effective Operation

The 6110 delivers repeatable analysis with minimal operator intervention. The package positioning aid with laser crosshairs confirms optimal placement and the intuitive touch-screen interface ensures product sampling is completed quickly, easily, and consistently for both line operators and lab personnel. There is no sample preparation necessary for total package and head space oxygen analysis.

### Reliable and Flexible

The 6110 Total Package analyzer operates on all types of cans and bottles due to its unique gas extraction and piercing system, resulting in reliable analysis with no container leakages. The CO<sub>2</sub> analysis measurement provides accurate results at any temperature, without having to warm the sample. The 6110 can also compensate CO<sub>2</sub> results for any package Nitrogen content – a perfect choice for analysis directly at the filler.

### Gas Phase Measurement

The Hach Orbisphere 6110 analyzes beverages without removing any product from its container. The measurement takes place in the gas phase, so there is no direct liquid contact with the 6110's sensing technology or sampling path. This reduces maintenance by eliminating hassles such as bleaching tubing and replacing valves to prevent fouling.

### Maximize the Uptime of your 6110 Total Package analyzer

Our expert service team works in partnership with you to provide professional start-up and commissioning and regular maintenance for your 6110 Total Package analyzer to ensure it is in the optimal condition. Please speak with your local Hach representative for service offerings in your region.



Be Right™

## Technical Data\*

<b>Range</b>	O <sub>2</sub> : 1 ppb - 12 ppm CO <sub>2</sub> : 0.75 - 5 v/v or 1.5 - 10 g/kg
<b>Repeatability (r95)</b>	TPO: ±5 µg/L / ±10%, whichever is greater CO <sub>2</sub> : ±0.05 v/v or 0.10 g/kg ±2 %, whichever is greater, measured on equilibrated packages at 10 - 25 °C
<b>Typical Analysis Time</b>	Approximately 4 minutes
<b>Units</b>	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, psi Temperature: °F, °C, K
<b>Operating Conditions</b>	Package temperature: -2 - 30 °C (28 - 86 °F) Package pressure: 1.4 - 6.8 bar (20 - 73 psi) Ambient temperature: 0 - 40 °C (32 - 104 °F)
<b>Laser Class</b>	A Class 1 LASER is installed in this instrument. Exposure to the beam of a Class 1 LASER will not result in eye injury. Intrabeam viewing of Class 1 laser products which emit visible radiant energy may still produce dazzling visual effects, particularly in low ambient light.

<b>Package Type</b>	Closure types: metallic, PET Package height: min. 90 mm (3.54 in.) max. 340 mm (13.39 in.) Package volume: min. 150 mL
<b>Enclosure Rating</b>	IP20
<b>Compliance Certifications</b>	European directives: Low voltage 2006/95/EC; EMC 2004/108/EC Electromagnetic compatibility standards: EN61326 Safety standard: IEC/UL/CSA 61010-1 Safety of Laser products: IEC/UL/CSA 60825-1
<b>Display Type</b>	Digital TFT VGA (640 x 480) colour touch screen
<b>Communication Capabilities</b>	1x Ethernet, 1x USB-A
<b>Dimensions (H x W x D)</b>	942 mm x 540 mm x 537 mm
<b>Weight</b>	55 kg
<b>Installation Requirement</b>	Power requirements: 100/240 VAC, 50/60 Hz Purge gas: CO <sub>2</sub> with purity >99.9% at 6 to 7 bar abs (87 to 102 psi)

\*Subject to change without notice.

## Order Information

**DG6110-SYS** Hach Orbisphere 6110 Total Package Analyzer  
Includes all consumables for 1 years' operation.\*  
*\*Depending on usage.*

### Accessories

<b>32301.A</b>	Electrochemical sensor cleaning and regeneration unit, 115 VAC
<b>32301.B</b>	Electrochemical sensor cleaning and regeneration unit, 230 VAC
<b>32816</b>	Sample shaker
<b>DG33526</b>	OPC software kit
<b>33002</b>	Power cable with US plug

### Consumables

<b>DG33520</b>	One year consumables kit (incl. 33117, DG33496, DG33491, 33156, 2956A-AT)
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<b>33117</b>	Rubber seal, for piercing tip
<b>DG33496</b>	Piercing tip for metal closure
<b>DG33497</b>	Piercing tip for plastic closure
<b>DG33491</b>	Kit of PTFE filters
<b>33156</b>	Antifoam recharge bottle, 1 Liter
<b>2956A-AT</b>	Recharge cartridges for sensor

### Validation Tools

<b>DG33373</b>	Air injection starting kit
<b>DG33374</b>	Air injection recharge kit
<b>DG33254</b>	Reference HS volume 16 mL
<b>DG33255</b>	Reference HS volume 25 mL

*Some of the items are only compatible with the latest 6110 version (V3). Ask your local Hach team for parts compatible with previous versions of the 6110.*

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