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_2 analysis measurement provides accurate results at any temperature, without having to warm the sample. The 6110 can also compensate CO_2 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.



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Technical Data*

 O_2 : 1 ppb to 12 ppm Range

 \overline{CO}_{2} : 0.75 to 5 v/v or 1.5 to 10 g/kg

Repeatability (r95) TPO: $\pm 5 \mu g/L \pm 10 \%$, whichever the

greater

 CO_2 : ±0.05 v/v or 0.10 g/kg ±2 %, whichever is greater, measured on equilibrated packages at 10 to 25 °C

Typical Analysis

Time

Approximately 4 minutes

Units O₂ Concentration: ppb, ppm

CO2 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 Operating Package temperature: **Conditions** -2 to 30 °C (28 to 86 °F)

> Package pressure: 1.4 to 6.8 bar (20 to 73 psi)

Ambient temperature: 0 to 40 °C (32 to 104 °F) Closure types: metallic, PET

Package height: min. 90 mm (3.54 in.) max. 340 mm (13.39 in.)

Package volume: min. 150 mL

IP20 **Enclosure Rating**

Compliance 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

Digital TFT VGA (640 x 480) **Display Type**

color touch screen

Communication 1 x USB client, 1 x USB host, Capabilities 1 x Ethernet

942 mm x 540 mm x 537 mm

Dimensions $(H \times W \times D)$

Weight 121.25 lbs. (55 kg)

Installation Power requirements: 100/240 VAC, Requirement

50/60 Hz

Purge gas: CO₂ with purity >99.9% at 6 to 7 bar abs (87 to 102 psi)

*Subject to change without notice.

Order Information

Package Settings

DG6110-SYS Hach Orbisphere 6110 Total Package Analyzer

Includes all consumables for 1 years'

operation.*

*Depending on usage.

Accessories

32301.A Sensor cleaning unit, 115 VAC 32301.B Sensor cleaning unit, 230 VAC

32816 Sample shaker DG33526 OPC software kit

33002 Power cable with US plug

Consumables

DG33520 One year consumables kit (incl. 33117,

DG33496, DG33491, 33156, 2956A-AT)

33117 Rubber seal, for piercing tip DG33496 Piercing tip for metal closure **DG33497** Piercing tip for plastic closure

DG33491 Kit of GORE-TEX® filters

33156 Antifoam recharge bottle, 1 Liter 2956A-AT Recharge cartridges for A1100 sensor

Validation Tools

DG33373 Air injection starting kit **DG33374** Air injection recharge kit DG33254 Reference HS volume 16 mL DG33255 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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