# Hach Orbisphere 6110 Total Package Analyzer



ApplicationsBeverage

### **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.



#### **Technical Data\***

Range	O <sub>2</sub> : 1 ppb to 12 ppm CO <sub>2</sub> : 0.75 to 5 v/v or 1.5 to 10 g/kg	Enclosure Rating Compliance	IP20 European directives: Low voltage
Repeatability (r95)	TPO: $\pm 5 \mu$ g/L $\pm 10 \%$ , whichever the	Compliance	2006/95/EC; EMC 2004/108/EC
	greater		Electromagnetic compatibility
	$CO_2$ : ±0.05 v/v or 0.10 g/kg ±2 %, whichever is greater, measured on		standards: EN61326
	equilibrated packages at 10 to 25 °C		Safety standard: IEC/UL/CSA 61010-1
Typical Analysis Time	Approximately 4 minutes		Safety of Laser products: IEC/UL/CSA 60825-1
Units	O <sub>2</sub> Concentration: ppb, ppm	Display Type	Digital TFT VGA (640 x 480) color touch screen
	CO <sub>2</sub> Concentration: v/v, g/kg, g/L %W	Communication	1 x Ethernet, 1 x USB-A
	Total Package Quantities:	Capabilities	
	mg, mL, mg/L,mL/L, μg/L	Dimensions	942 mm x 540 mm x 537 mm
	Pressure: bar, mbar, psi	(H x W x D)	
	Temperature: °F, °C, K	Weight	121.25 lbs. (55 kg)
Operating Conditions	Package temperature: -2 to 30 °C (28 to 86 °F)	Installation Requirement	Power requirements: 100/240 VAC, 50/60 Hz
	Package pressure: 1.4 to 6.8 bar (20 to 73 psi)		Purge gas: CO <sub>2</sub> with purity >99.9% at 6 to 7 bar abs (87 to 102 psi)
	Ambient temperature: 0 to 40 °C (32 to 104 °F)		*Subject to change without notice.
Package Settings	Closure types: metallic, PET		
	Package height: min. 90 mm (3.54 in.) max. 340 mm (13.39 in.)		
	Package volume: min. 150 mL		

#### **Order Information**

DG6110-SYS	Hach Orbisphere 6110 Tota Includes all consumables for operation.*	0 ,	DG33496 DG33497 DG33491	Piercing tip for metal closure Piercing tip for plastic closure Kit of GORE-TEX <sup>®</sup> filters
Accessories	3		33156	Antifoam recharge bottle, 1 Liter
32301.A	Sensor cleaning unit, 115 V	/AC	2956A-AT	Recharge cartridges for sensor
32301.B	Sensor cleaning unit, 230 V	/AC	Validation Tools	
32816	Sample shaker		DG33373	Air injection starting kit
DG33526	OPC software kit		DG33374	Air injection recharge kit
33002	Power cable with US plug		DG33254	Reference HS volume 16 mL
Consumable	es		DG33255	Reference HS volume 25 mL
DG33520	One year consumables kit ( DG33496, DG33491, 3315	,	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.	
33117	Rubber seal, for piercing tip	)		

### HACH COMPANY World Headquarters: Loveland, Colorado USA

United States:				
Outside United States:				
hach.com				

800-227-4224 tel 970-669-2932 fax 970-669-3050 tel 970-461-3939 fax

orders@hach.com int@hach.com

## Printed in U.S.A.

©Hach Company, 2020. All rights reserved. In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

