



# Orbisphere 510 Controller O<sub>2</sub> (EC), CO<sub>2</sub> (TC), Wall Mount, 100-240 V AC, 0/4-20mA, Ext. Press.

**Product #:** AED Price: 510AD0/W1C0P000

Contact Hach

#### Precise, Powerful Process monitoring

The Orbisphere 510 multi-channel controller offers precise, powerful process monitoring capability.

Designed to complement the Orbisphere high quality sensors these instruments provide accurate, repeatable trace level measurements and an impressive level of data management.

Depending on the version, the Orbisphere 510 controller can be combined with up to 3 sensors among:

- Orbisphere 311xx Oxygen Sensors
- Orbisphere A1100 Oxygen Sensors
- Orbisphere K1100 Oxygen Sensors
- Orbisphere M1100 Oxygen Sensors
- Orbisphere 314xx Carbon Dioxyde Sensors
- Orbisphere C1100 Ozone Sensors
- Orbisphere 312xx Hydrogen Sensors
- Orbisphere 315xx Nitrogen Sensors

These controllers are designed for applications in the power generation, electronics, life sciences, beverage, chemical and water treatment industries.

Do not hesitate to contact us to define the best configuration for your application.

## High level of measurement accuracy and rapid response time for reliable and effective process monitoring

Multiple point monitoring with up to three sensor inputs. High level of measurement accuracy and rapid response time means reliable and effective process monitoring. Common interference effects due to CO<sub>2</sub>, H<sub>2</sub>S, H<sub>2</sub>, N<sub>2</sub>, humidity, salinity and chlorinity can be eliminated during the configuration process.

#### Easy to use, intuitive software navigation

With an easy to use, intuitive software navigation it is simple to use for line operators and flexible enough for the needs of technical personnel.

### Robust instrument, built to handle the industrial environment

Orbisphere 510 instruments are fully compatible with all Orbisphere electrochemical sensors including Smart sensors. Smart sensors can be calibrated in the laboratory before installing on-line and store their own calibration information. Simple transfer of product list and global configuration settings between instruments using USB-client or USB-host.

#### Internal diagnostics simplify trouble-shooting, reminders for maintenance & calibration

Internal diagnostics simplify trouble-shooting and issue reminders for maintenance and calibration. Adjustable alarms and outputs provide assurance that any out of specification events are appropriately registered.

#### Large data storage

Data storage of up to 10,000 measurements, last 1,000 operator actions and details of last 50 calibrations. Software password protection offers 5 levels of control access, minimising the risk of errors in operation or configuration.

#### **Specifications**

Analogue outputs:	3 smart 0/4-20 mA (500 ohms), programmable as linear or tri-liniear, configurable to send diagnostics information
Communication capabilities:	3 x 0/4-20 mA; RS485; Ethernet
Compatible instruments:	Channel 1: 311xx or A1100, Channel 2: 314xx
Compliance certifications:	EMC: EN61326-1:2006
	CE: EN61010-1:2010
	ETL, conforming to UL 61010-1 and CSA 22.2 No. 61010-1
Controller:	510, Multi-channel
Data storage:	Rolling buffer or store once mode for up to 10,000 measurements and 1000 operator actions
	Holds calibration records for last 50 calibrations
Dimensions (H x W x D):	230.5 mm x 250 mm x 160 mm
Display:	Colour TFT touch-screen display
Electrode compatibility:	Channel 1: 311xx or A1100
	Channel 2: 314xx
Enclosure Construction:	Wall mount
Enclosure waterproof rating:	IP65 / NEMA 4X
Material:	Stainless steel
Measurements:	Resolution, accuracy and response time are determined by sensor
Mounting:	Wall Mounting Pressure Sensor Ready
Number of channels:	2
Operating conditions:	0 - 95 % non-condensing relative humidity
Operating temperature range:	-5 - 45 °C
Parameter:	O <sub>2</sub> (EC), CO <sub>2</sub> (TC)
Password Protection:	5 levels of authorised access to configuration and data management
Power:	Universal 100/240 VAC @ 50/60 Hz, 25 VA
Power requirements (Voltage):	100 - 240 V AC
Relays:	3 measurement alarm relays (2A to 30 VAC or 0.5 A to 50 VDC); configurable to send diagnostics information
	1 system alarm relay (2 A to 30 VAC or 0.5 A to 50 VDC)
Units:	Gas concentration: Configurable for gas or liquid phase with multiple unit options
	Pressure: External and barometric pressure with multiple unit options
	Temperature: Sample temperature with unit options (K, °C, °F)

User interface:	Touch-screen panel displays: concentration, trend graph, diagnostics, alarm status, historical data
Warranty:	24 months
Weight:	3.8 kg
What's included?:	510 controller and manual only.
	Sensors and cables, flow-chamber or process connection must be ordered separately.

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