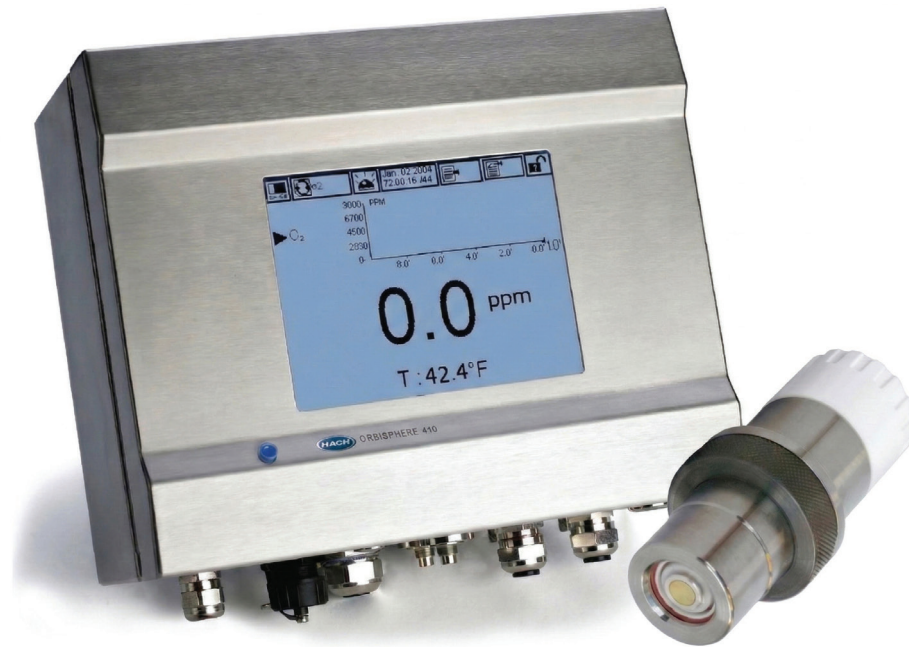




Orbisphere C1100 Low Pressure Ozone Sensor

Applications

- Drinking Water
- Food and Beverage
- Environmental Monitoring



Time and Cost Saving Ozone Sensor

Maintenance in Less Than Five Minutes

Traditional cleaning processes can take more than thirty minutes to complete, but with the C1100 patented cartridge system, both the set-up and the initial sensor replacement procedure can be performed in less than five minutes without the need for a trained technician.

Low-Touch, Low-Drift Technology

The sensor can remain up to 6 months without calibration. By using a unique platinum guard ring technology, the sensor does not require a separate zero calibration, minimizing intervention and low-end drift.

More Accurate than the Lab

The C1100 ozone sensor has a unique air calibration feature that offers operators a quick and easy method to calibrate without requiring an external standard. This air calibration provides better accuracy than the lab and can be done on the operating floor.

Built to Last

The robust stainless steel design makes this sensor extremely robust, with life expectancy going up to 10 years.

Principle of Operation

The electrochemical sensor consists of one cathode and one anode immersed in an electrolyte solution which is separated from the gaseous or liquid sample by a gas permeable membrane. Through an applied voltage, current will flow between the anode and the cathode.

A guard ring electrode surrounds the center electrode in order to reduce the influence of other gases. Gas penetrating through the membrane into the cell dissolves in the electrolyte and undergoes a reaction at the cathode, causing a measurable electric current to flow.

This current is proportional to the amount of gas entering the cell, which in turn is proportional to the partial pressure of gas in the sample outside the cell. The result is shown as gas concentration, which can then be displayed with a choice of several measuring units, according to instrument setup.

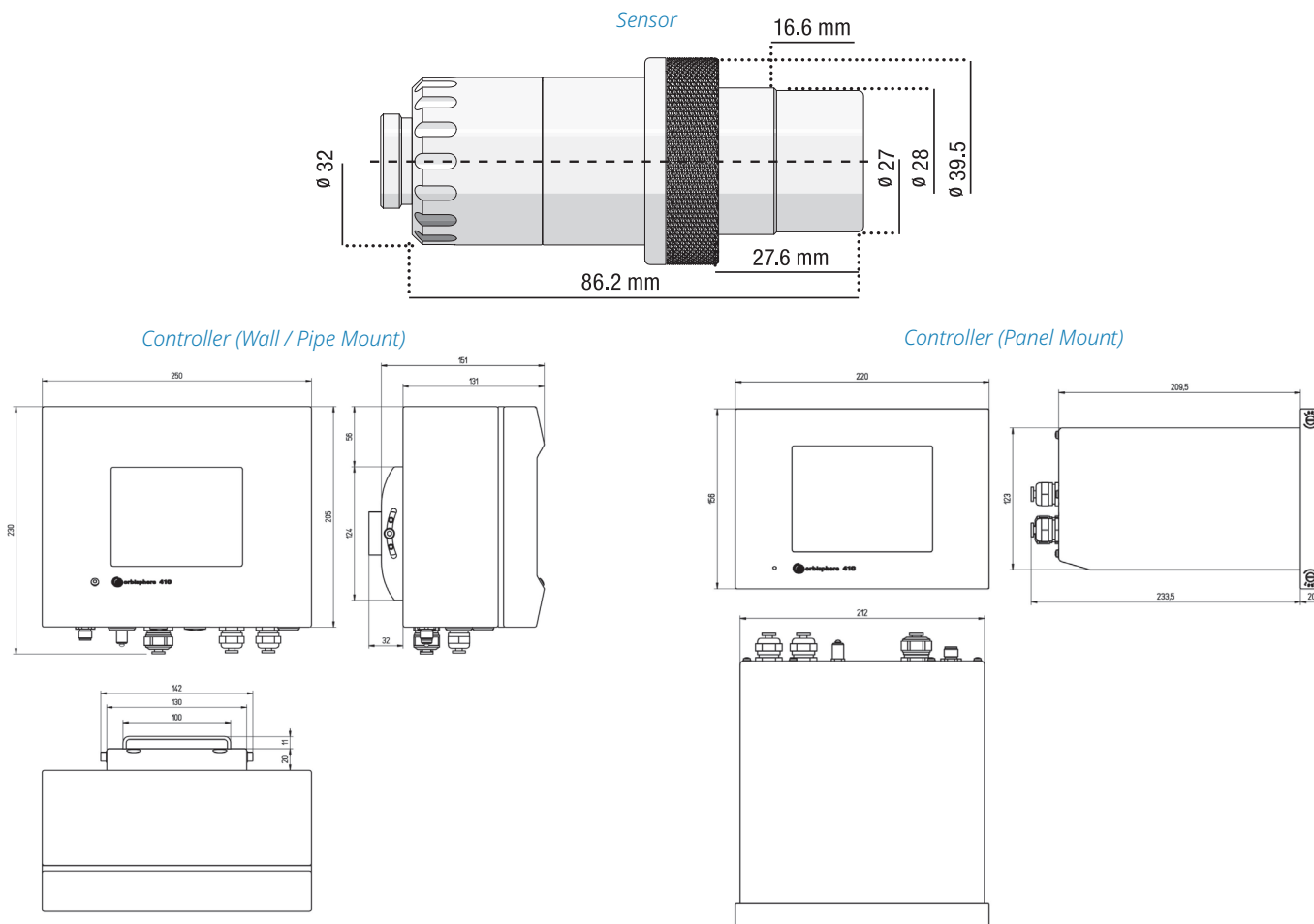
Technical Data*

C1100

Range	0 ppb - 50 ppm O ₃
Accuracy	± 0.4 ppb or ±5% whichever is the greater
Pressure Range	Up to 4 bar
Lower Limit of Detection (LOD)	0.6 ppb
Response Time	30 s

Temperature Range	Working operating range: -5 - 45 °C Maximum operating range: -5 - 100 °C
Membrane	2957A-LP
Flow Rate	350 mL/min (typical)

*Subject to change without notice.



Order Information

C1100-LP0	Electrochemical low pressure ozone sensor, stainless steel version, maximum pressure 4 bar, with Smart capability.
2957A-LP	Recharge kit of 4 pre-filled cartridges with pre-mounted 2957A membranes for C1100 ozone sensors with 33051-xT cap only.
410L/W1C00000	Orbisphere 410 ozone (EC) Wall Low Pressure Controller.
32001.111	Flow chamber in stainless steel (316) with 1/4" fittings. Supplied with FKM/FPM O-rings.
32001.110	Flow chamber in stainless steel (316) with 6 mm fittings. Supplied with FKM/FPM O-rings.
32501.05	Sensor cable for connecting TC & EC sensors to Orbisphere 410/510 controller, 5 m.



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