

PRODUCT INFORMATION

PROCESS ANALYSIS

OZONE SENSOR

ORBISPHERE C1100



True Zero measurement: ORBISPHERE C1100

→ **True Zero – drift free and accurate measurements brings peace of mind**

→ **Fast, easy, traceable and reliable calibration**

→ **Saving WFI (Water For Injection) costs with in-line mounting**

Drift free and accurate measurements

With the unique ORBISPHERE platinum guard ring technology preventing false signals arising from the electrolyte, this sensor provides a true, drift free zero. Operators can be confident of measurements and alarm settings knowing the sensor is providing a 0.6 ppb detection level and ± 0.4 ppb accuracy at a 5 ppb level.

The elimination of false alarms significantly reduces production line stoppages and waste.

The ORBISPHERE C1100 ozone sensor is designed to offer pharmaceutical operators peace of mind when measuring ozone in ultrapure water loops.

This sensor can measure ozone at the pre-UV and post-UV phases and at the end of the loop.



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Fast, easy, traceable and reliable calibration

This ozone sensor has a unique air calibration feature that offers operators a quick and easy solution to calibrate with an accuracy of $\pm 5\%$ or $\pm 1\%$ against ozone known concentration.

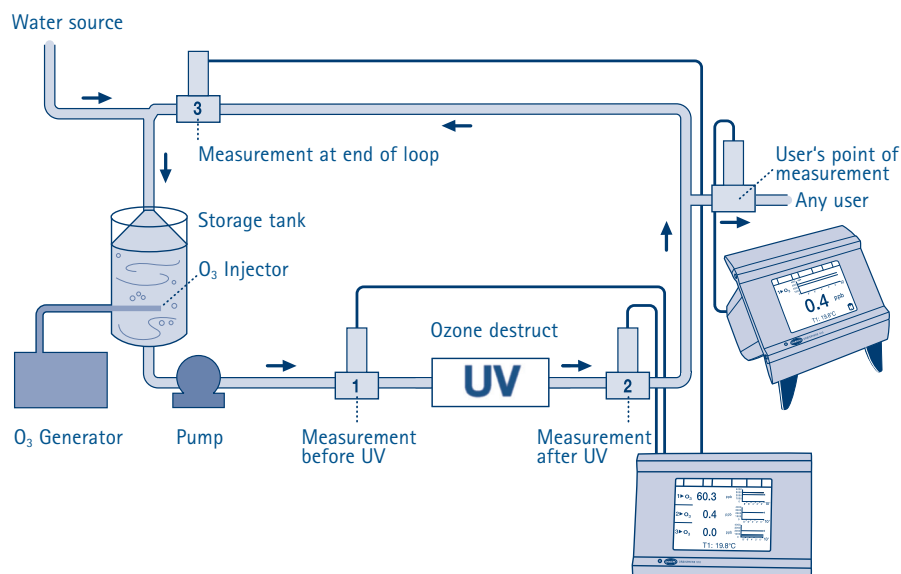
The sensor is delivered with a traceable validation certificate using a $\pm 0.5\%$ reference.

The ORBISPHERE C1100 is the only sensor in the market that provides this type of accuracy and certification!

Saving WFI costs with in-line mounting

The ORBISPHERE C1100 is uniquely designed for in-line performance eliminating the need to run costly WFI to drain. In comparison to other measurement systems, the C1100 saves more than 15 cubic meters of WFI per day.

Typical ozonated water loop



Technical information

	C1100
Measuring range	0 ppb – 50 ppm O ₃
Accuracy	± 0.4 ppb or $\pm 5\%$, whichever is the greater
Repeatability r^{95} (2σ)	± 0.4 ppb or $\pm 0.5\%$, whichever is the greater
Pressure rating (Stainless steel / Titanium)	40 bars / 100 bars (580 psi / 1450 psi)
Limit of detection (3σ)	0.6 ppb
Response time	30 s
Working operating range	-5 to 45 °C (23 to 113 °F)
Maximum operating range	-5 to 100 °C (23 to 212 °F)
Membrane, material	2956A-C, PFA
Recommended inflow in flowchamber 32001	350 ml/min
Recommended flow rate in the pipe	30 cm/sec
Immersion protection	IP 68
Weight	300 g

Note: Limit of quantification = 10σ . The recommended inflow stated for a sensor with a safety cap without a stainless grill. With a stainless the inflow needs to be 50% higher.
Subject to change without notice.

Ordering information

C1100-S00

Electrochemical ozone sensor, Stainless Steel version, maximum pressure 40 bar.

C1100-T00

Electrochemical ozone sensor, Titanium version, maximum pressure 100 bar.

EN 10204 2.2 and 3.1 certificates are available upon request.



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