WEDECO 400plus Series Ozone Gas Monitors
The WEDECO 400plus Series Ozone Monitors are state of the art ozone monitors for Low, Medium, and High Concentration applications. All monitors utilize the UV absorption measurement principle of operation and are enclosed in a robust, NEMA 4X enclosure. Additionally, all medium and high concentration models in the 400plus Series come equipped with an ozone destruct to ensure safe operation at all times.

The LC-400plus is ideal for critical low-level ppm safety and process applications. With NIST traceable calibrations, customers can be assured that the LC-400plus will offer the protection and reliability needed in low-level applications. Regular calibration of these monitors is important, and annual calibration certificates are often required for many agencies. The LC-400plus is equipped with a removable sensor bench, which contains the UV lamp, sensor, and the solenoid valve. This removable board allows for the operator to only remove this one component for calibration on the low concentration monitors, which significantly reduces maintenance time and costs.

The design of the MC-400plus has been specifically optimized for applications requiring the measurement of ozone at near-ambient pressure such as water treatment contactor off-gas measurement. The MC-400plus comes equipped with a Sample Conditioning System to remove moisture from off-gas samples in humid environments. For all types of monitors and instrumentation, installation is critical to the health and operation of the unit. Especially in wet environments, the installation guidelines should be reviewed to ensure longevity of the unit. Xylem can provide installation recommendations for these monitors if needed.

The HC-400plus has been designed to give accurate and stable readings over long periods of time with little or no maintenance or calibration. The sensor module uses detectors which have a very narrow band of spectral sensitivity, eliminating the need for UV band pass filters which are subject to deterioration by UV or humidity. Two detectors are used: one for the ozone measurement, and the other to compensate for changes in UV lamp intensity. As many high concentration analyzers are utilized for ozone generator control applications, accuracy and reliability are key. The HC-400plus offers accuracy within ± 1% of the full scale and is ideal for generator control applications.
## Specifications

<table>
<thead>
<tr>
<th>Model LC-400plus</th>
<th>Model MC-400plus</th>
<th>Model HC-400plus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Principle</strong></td>
<td>UV Absorption (Beer Lambert Law)</td>
<td>UV Absorption (Beer Lambert Law)</td>
</tr>
<tr>
<td><strong>Ranges</strong></td>
<td>0 to 10 ppm (Range is programmable)</td>
<td>0 to 10,000 ppm, 0-5%/wt, 0-50 g/Nm³ (Range is programmable)</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>± 1 % of Full Scale</td>
<td>± 1 % of Full Scale</td>
</tr>
<tr>
<td><strong>Precision / Repeatability</strong></td>
<td>± 0.5 % of Full Scale</td>
<td>± 0.5 % of Full Scale</td>
</tr>
<tr>
<td><strong>Display Resolution</strong></td>
<td>0.001 ppm</td>
<td>1 ppm, 0.001 % wt.</td>
</tr>
<tr>
<td><strong>Response Time</strong></td>
<td>&lt; 30 seconds to 95 %</td>
<td>&lt; 45 seconds to 95 %</td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>41–113°F (5–45°C)</td>
<td>41–113°F (5–45°C)</td>
</tr>
<tr>
<td><strong>Dimensions (H × W × D)</strong></td>
<td>16.01” × 15.77” × 8.02” (407 mm × 402 mm × 204 mm)</td>
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</tr>
<tr>
<td><strong>Weight</strong></td>
<td>15.3 lbs (6.9 kg)</td>
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</tr>
<tr>
<td><strong>Power</strong></td>
<td>110–240 V~, 50/60 Hz, 74 W Max</td>
<td>110–240 V~, 50/60 Hz, 74 W Max</td>
</tr>
<tr>
<td><strong>Analog Output</strong></td>
<td>0–5 V or 4–20 mA isolated output</td>
<td>0–5 V or 4–20 mA isolated output</td>
</tr>
<tr>
<td><strong>Status Outputs</strong></td>
<td>System OK, Invalid Reading, Pneumatic Fault, UV Lamp Fault</td>
<td>System OK, Invalid Reading, UV Lamp Fault</td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>CE</td>
<td>CE</td>
</tr>
<tr>
<td><strong>Degree of Protection (NEMA)</strong></td>
<td>NEMA 4X (IP65)</td>
<td>NEMA 4X (IP65)</td>
</tr>
<tr>
<td><strong>Averaging</strong></td>
<td>User selectable 1 to 30 samples</td>
<td>User selectable 1 to 30 samples</td>
</tr>
<tr>
<td><strong>Calibration Traceability</strong></td>
<td>NIST</td>
<td>Calibrated to IOA Standards</td>
</tr>
<tr>
<td>Standard one year warranty</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>UV Absorption Method</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Microprocessor controlled</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Menu driven software</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Fast response times</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Minimal zero drift</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Programmable concentration alarms</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Programmable auto-zero function included</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Temperature and pressure compensation (standard)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Optional Ethernet</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Sample Conditioning System for sampling from humid environments (NEMA 4X only)</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>1, 3 and 6 stream versions available for safety monitoring</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Programmable High and High-High alarm contacts</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Xylem |ˈzɪləm|

1) The tissue in plants that brings water upward from the roots;
2) a leading global water technology company.

We’re 12,000 people unified in a common purpose: creating innovative solutions to meet our world’s water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com