

NSF-61 MULTIPARAMETER CHLORINE SENSOR

A breakthrough for drinking water and wastewater monitoring, The **Halogen MP5™** Multiple Parameter Sensor tests 5 parameters using a 3 electrode amperometric chlorine measurement. The MP5™ is unaffected by flow or pressure, is self cleaning, automatically compensates for pH, and is NSF61 certified. The MP5™ utilizes Halogen's patented RapidResponse ORP™ technology, a specialized implementation of ORP measurement that will report more consistent numbers thanks to a high resistance to poisoning.¹

The MP5™ requires little to no maintenance, can be installed in a flow cell, directly in a pipe, or immersed in a tank, channel, or basin. Simple to install and inexpensive to operate, the Halogen MP5™ is unlike any other sensor on the market today.

UNIQUE FEATURES

The **Halogen MP5™** is unique in the market.

- Self-cleaning & low maintenance
- No reagents
- Flow independent - insensitive to changing process conditions
- No membranes or electrolyte
- No waste stream required
- Low drift- calibration stable for many months
- Factory calibrated, minimal drift

INSTALLATION ADVANTAGES:

Compared to typical solutions, the Halogen MP5™ has many advantages when deployed:

- Easy to install
- Installed directly into a wet tap valve, side stream, or submersible
- Remote mounting of more than 100 feet or more from display
- System is equipped with 4 20mA and MODBUS RTU. Other communication protocols are available upon request.
- 24 VDC or 90 to 240 VAC operation

LOW TOTAL COST OF OWNERSHIP

Halogen's MP5™ saves additional money over time:

- Low Maintenance Cost
- No membranes, reagents, or electrolyte
- Long calibration intervals
- Easy calibration if needed

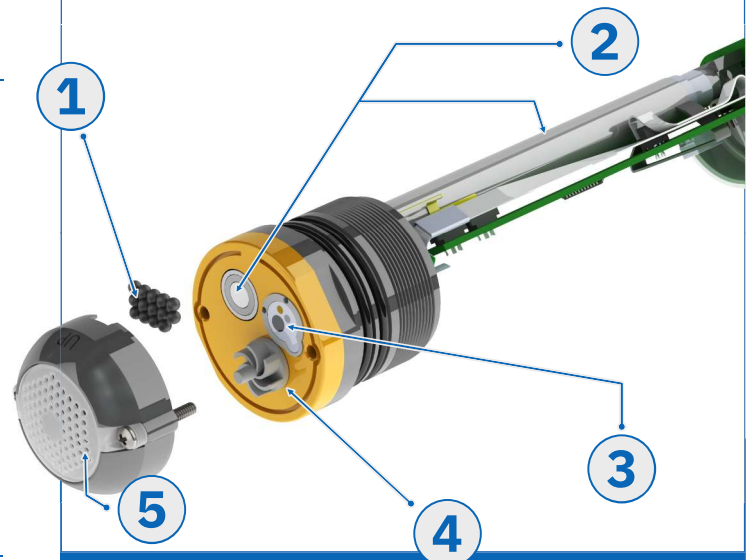
MEASUREMENTS

The MP5™ measures vital information in a reliable and low cost manner.

- Free or Total Chlorine
- Conductivity
- pH
- Rapid Response ORP*
- Temperature











FIGURE 1: HALOGEN SYSTEMS MP5™ MAIN FEATURES



1. The **SensiCLÈNE™** self-cleaning system reduces maintenance through an always-on cleaning method. **2.** **DryGLAS™** technology ensures robust operation even if the line goes totally dry. **3.** The **MP5™** constantly samples 5 parameters using a technology, and is unaffected by flow, pressure, or temperature. **4.** HSI's patented impeller system removes flowrate as an issue. **5.** HSI's patented sensor system allows for wet-tap, side-stream, immersion and direct pipe insertion, eliminating the need for waste stream membranes, reagents, & electrolyte, while greatly reducing calibration & maintenance.

¹ **Rapid Response ORP™:** Halogen's unique implementation of Oxidation Reduction Potential (ORP) measurement may differ from discrete ORP sensors due to its advanced method of measuring."

MODELS & OPTIONS

| Sensor Models (D & W) "D" = Drinking Water "W" = Wastewater | Wet Tap | Immersion/Sidestream | Pipe Tee |
|--|--|--|---|
| |  <p>D-H1WT-P / W-H1WT-P Direct Pipe Insertion: Unaffected by variable flow-rates, it can accurately monitor 5 parameters at flows from 0-4m/s & up to 145 PSI</p> |  <p>D-H1LF-P / W-H1LF-P Sidestream or Immersion installations. 1" PVC Boom Mount (Flow Cell Shown)</p> |  <p>D-H1MF-P / W-H1MF-P Specifically designed for PVC tee installs. Requires 2" PVC Tee and Adapter: PT-01</p> |
| Kits and Extras |  <p>RMR-WT Removal tool: for Wet Tap sensors.</p> |  <p>FC-02 Flow-cell Kit:</p> |  <p>PT-01 PVC Sleeve Adapter</p> |
| Display Transmitter Options | <div>  <p>CN-01 Display 4 Outputs (4) 4-20 mA Outputs, 120V Input power (cord)</p> </div> <div>  <p>D02 Display 4 Outputs (4) 4-20 mA Outputs, 24VDC Input Power</p> </div> | | |

| Measurement Specifications | Range | |
|---|--|-------------------------------------|
| Accuracy | ±15% of the reference test. Drift: < 1% (calibration checks quarterly or longer depending on the application.) Sensors are factory calibrated. | |
| Measurement range | 0 to 20 ppm chlorine (total), 0-5 ppm (free) | |
| Free or Total Chlorine | <ul style="list-style-type: none"> • Low Limit of Detection (LOD): 30 ppb (0.03 ppm) or better • Limit of Quantitation (LOQ): 110 ppb (0.11 ppm) or better | |
| Oxidation Reduction Potential (ORP)* | 0 to 1100 mV* (See footnote on previous page for additional information about RapidResponse ORP™) | |
| Conductivity | Drinking Water: 100 to 5,000 µS | Wastewater: 150 to 65,000 µS |
| pH | 5 to 12 | |
| Temperature | 0 to 100° C | |

certified for
NSF-61
 installations
 EPA Method
334.0
 Compliant