

Maintenance-free* chlorine sensors

Simple, smart, powerful...

... just like running water



No membrane, no reagent, no waste stream, no maintenance*

Halogen chlorine sensors, they just work!

Direct in-pipe metering

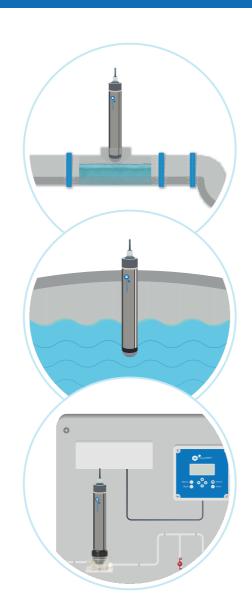
NSF61 certification allows Halogen's sensors to be inserted directly into a drinking water pipe. No waste stream disposal is required.

Standalone in a tank

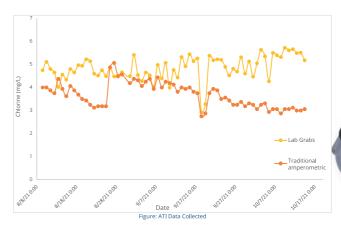
Halogen's sensors are unaffected by fluctuating flow speed or pressure. They work just the same when suspended on a floater or fixed on a plunger in a water tank.

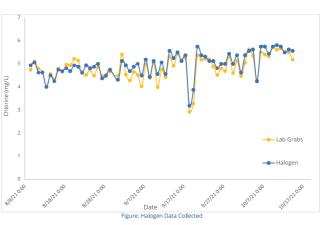
With a flow cell

Upgrade your existing installation to Halogen technology and benefit from increased accuracy & extended sensor lifetime. Make immediate savings on maintenance.



Halogen MP5™ vs traditional amperometric: response over time



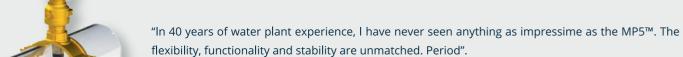


NSF61 certification

Suitable for drinking water

(*) What "No maintenance" means for us

- Calibration stability 6-12 months
- | Wear parts change every 12 months
- | Chlorine sensor lifetime: 5 years
- | Easy onsite device maintenance
- No wait time, reading under a minute



- Drinking Water Systems Engineer

"Nobody thought that an amperometric sensor would be durable enough to handle in-pipe pressures, much less going from 0 to 140 psi in under 4 minutes, in saltwater, in silty harbors without any drift for months, but they did it, and it's amazing".

- Ballast Water Management System Engineer



Other **Applications**

- 1. Waste water
- 2. Pools & spa's
- 3. Hydroponic
- 4. Fish farms
- 5. Cooling systems
- 6. Ballast water



Datasheet Halogen MP5



Multi-parameter chlorine sensor:

- Free chlorine, pH, Temperature, Conductivity & ORP
- Limit of detection (LOD): 10 ppb (0.01 ppm)
- Limit of quantitation (LOQ): 40 ppb (0.04 ppm)
- | Turbidity has no effect up to 3000 ppm
- Pressure range: -0.07 to 10 bar
- | Battery power available
- | Modbus RTU
- | Chlorine measurement range : 0 to 20 ppm
- ±5% of the calibrated value (DPD) at any pH between 6.5 and 8.75
- ±4% of the calibrated value (DPD) at any temperature between 15° and 35°C
- $\pm 4\%$ of the calibrated value (DPD) at any conductivity between 200 and 10,000 μS
- ±10% under flow changes from 0 to 4 meters/second velocity

Worst of all water conditions prepared us for any water application

Ships take in ballast water from oceans across the world, picking up invasive species that, when released later, have the potential to wreak havoc on ecosystems and industries. Halogen sensors were originally developed to monitor the chlorine levels in such ballast water and preserve ocean biodiversity. The harsh conditions of sea water, with a wide range of temperatures, high salinity & alkalinity, and with high pressure in the ballast piping system, demanded the sensors to meet parameters most industry insiders felt were impossible

