

# AdvantEDGE SERIES™

## Free Chlorine Panel System

- **Amperometric measurement**
- **Temperature compensation**
- **Optional automatic pH correction**
- **Pre-calibrated**
- **True plug and play**
- **Rugged Teflon® membrane**
- **Replaceable membrane cap**
- **Optional remote measurement, calibration, configuration, and diagnostics**
- **Turnkey monitoring system**

### Markets and Applications

#### Drinking water

Production and distribution

#### Food and Beverage

Monitor sanitized process water  
Monitor sterilization of glassware

#### Reverse Osmosis

Reduces possibility of filter membrane damage due to high chlorine levels



### AdvantEDGE Free Chlorine Panel System

This free chlorine sensor will measure accurately in processes that are between 4 and 9 pH. When used with a LD500 local display unit and a pH measurement system, measured hypochlorous acid (HOCl) and hypochlorite ion (OCl<sup>-</sup>) concentration can be used to determine free chlorine present.



### Components

#### Free Chlorine Sensor Head

Pre-calibrated for free chlorine and temperature. Can be plugged into any LD500 Local Display to yield accurate 24-bit data.



#### Interface Module

Provides universal conversion of sensor signals and interactive communications for measurement, calibration, configuration and diagnostics.



#### Communications Adapter

Plugs into the Interface Module to provide power and direct interactive communications with control systems.



#### LD500 Local Display

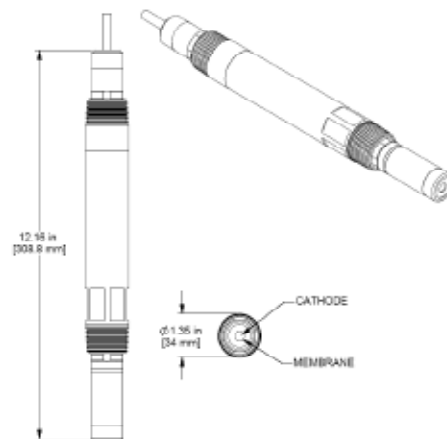
2 line display and 7 key navigation. Data reporting with up to 2 current outputs. 2 Form C relays. Optional digital communications protocols.



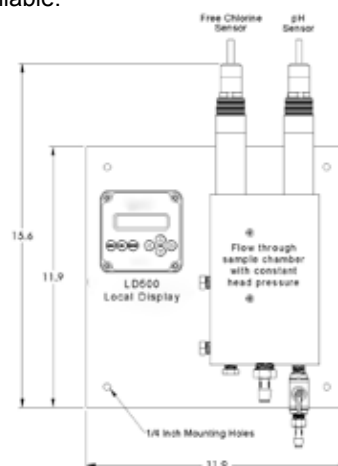
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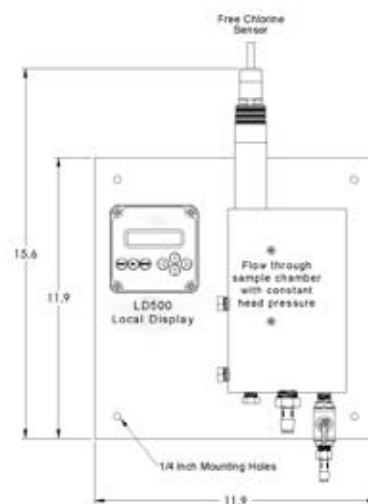
Specifications	
Measurement System Performance	<b>Ranges:</b> 0 to 5ppm and 0 to 20 ppm
	<b>Resolution:</b> 0.005 ppm
	<b>Accuracy:</b> 2% or ±10 ppb (whichever is greater)
	<b>Step response time:</b> 90% in 90 seconds
Operational Environment	<b>Temperature range:</b> 0 °C to 45 °C (32 °F to 113 °F)
	<b>Maximum pressure:</b> 15 psig @ 45 °C
	<b>System flow in chamber:</b> 200 to 250 mL/min
Free Chlorine Operation	When chlorine and pH systems are connected to the LD500 local display, HOCl and ClO dissociation curves are pH compensated and used to calculate free chlorine present. A stable pH value can also be entered manually.
Power Requirements	<b>Voltage range:</b> 10 to 30 VDC; 100-240 VAV optional
	<b>Maximum Power:</b> 200 mW
	<b>Typical Power:</b> 120 mW
Construction	<b>Process Electrodes:</b> gold cathode, silver anode
	<b>Membrane:</b> Teflon®
	<b>O-rings:</b> Viton®
	<b>Sensor head material:</b> Noryl®
	<b>Interface module material:</b> Peek or CPVC
	<b>Weight:</b> 1.2 lbs.
Units of Measure	<b>Measurement units:</b> ppm, free chlorine
	<b>Temperature units:</b> °C, °F
Calibration	<b>Sample:</b> 1 point
	<b>Zero:</b> 1 point
Other Configuration Options	<b>Sensor filter:</b> 0 to 100 seconds
	<b>Temperature filter:</b> 0 to 100 seconds
Approvals and Ratings	<b>Immunity and emissions:</b> CE Certified 89/336/EEC:CISPER 11, EN61000 (-4-2,-4-3,-4-4,-4-6,4-8)
	<b>Safety:</b> CuLus Listed; 367G E303570
	<b>Hazardous locations:</b> Haz Loc Class 1, Division 2, Groups A, B, C, D, Max Ambient 50 °C
Note: Class II DC power supply required	
Note: Precalibrated at the factory	



Chlorine electrode system provides universal conversion of sensor signals and interactive communications for measurement, calibration, configuration and diagnostics. Mounting adapters, junction boxes and recharge kits are available.



System with free chlorine and pH sensors installed.



System with free chlorine sensor only.

# LEAD FREE\*

\*LEAD FREE: The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.

\*SIN PLOMO: La superficie mojada de este producto que entra en contacto con agua para el consumo contiene menos de la cuarta parte de uno por ciento (0.25%) de plomo por peso.

\*SANS PLOMB: \*Les surfaces de ce produit en contact avec l'eau potable contiennent moins d'un quart d'un pour cent (0,25%) de plomb par poids.