Engineering Specification

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

Reliable Chlorine Monitoring

Specifications

HF® scientific developed the CLX OnLine Residual Chlorine Monitor specifically for drinking water, wastewater, industrial and marine residual chlorine monitoring applications.

The CLX OnLine Residual Chlorine Monitor is manufactured using microprocessor based technology making it the most reliable and cost efficient instrument for monitoring residual chlorine.

Colorimetric DPD chemistry technology provides a proven, stable and reliable reading along with the most economical method available.



Features

Colorimetric DPD Chemistry

Proven reliable and economical, colorimetric DPD (N,N-diethyl-p-phenylenediamine) chemistry is the most accurate method for measuring free or total residual chlorine.

Rugged Enclosure

The CLX's small footprint and corrosion resistant enclosure allows for a simple installation that will fit in almost any space.

Optical Design

New optical design uses similar optics to the handheld portable Chlorine Photometer. The new design increases accuracy and allows for comparable and precise readings between the OnLine Monitor and handheld portable instruments.

Removable Sample Cuvette

A removable sample cuvette allows for simple cleaning and maintenance. Viewable sample chamber allows a clear view of the sample cuvette while the instrument is sampling.



Changing the Sample Cuvette

Cycle Times

User selectable cycle times allow the user to set the cycle time from 60 seconds up to 10 minutes. Low volume reagent and sample chamber allow for affordable reagent costs and decreases water consumption.

Certification

Listed or Certified to CE, UL, CSA (ETL, ETLc)

HF scientific product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact HF scientific Technical Service. HF scientific reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on HF scientific products previously or subsequently sold.

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Sample Specifications

The Residual Chlorine Monitor shall be able to measure free or total chlorine using the DPD colorimetric method. The Chlorine Monitor shall have a measurement range of 0.01–10 mg/L. The Chlorine Monitor shall include the power supply, sensor and display in one corrosion resistant enclosure. The Chlorine Monitor shall have readings consistent with laboratory and portable Chlorine Photometers. The Chlorine Monitor shall have standard 4–20 mA outputs and RS-485 with Modbus Protocol. The 4–20 mA output shall be standard or reversible. The Chlorine Analyzer shall have a removable sample cuvette. The sensor shall have a clear view to the optical chamber allowing viewing of the sample and reaction of the reagents, before, during and after a reading. Accuracy shall be ±5% with a resolution of 0.01 mg/L for the range of 0–6 mg/L and ±10% with a resolution of 0.01 mg/L for the range of 6–10 mg/L. The Chlorine Monitor shall have a user selectable cycle time between 110 seconds and 10 minutes (optional 60 seconds to 10 minutes). The Chlorine Monitor shall be capable of 30 days of unattended operation. The Chlorine Monitor shall take a zero reading before each reading to compensate for color in the sample. The Chlorine Monitor shall have microprocessor based technology. The Monitor shall have two user selectable alarm relays.

Range:	0.01–10 mg/L, optional up to 15
Cycle Time:	Adjustable; 60 seconds to 10 minutes (600 seconds) Note: The system defaults to 2.5 minutes (150 seconds)
Resolution:	0.001 mg/L (PPM)
Accuracy:	0–6 mg/L; ±5% (or 0.03 mg/L of Cl2 whichever is greater)
	6–10 mg/L; ±10%
Method:	USEPA accepted DPD method of analysis for measuring Free or Total Residual Chlorine
Standard Outputs:	4–20 mA and Bidirectional RS-485 with Modbus or Modbus TCP
User Alarms:	2 User Selectable Alarms for Sample Concentration (Form C 240VAC 2A)
Operating Temperature:	0°C to 40°C (32°F to 104°F)
Input Pressure:	5–150 psi
Enclosure:	ABS Plastic, includes an EPDM gasket around the door
Power:	100–240 VAC, 50/60 Hz, 80 VA
Certifications:	CE, UL, CSA (ETL, ETLc)
Shipping Dimensions:	16" x 16" x 10" (41 cm x 41 cm x 26 cm)
Shipping Weight	8 lb (3.6 kg)



Ordering Information

Catalog No.	Description
28002	CLX OnLine Residual Chlorine Monitor for Free or Total Chlorine Complete with operating manual. Reagents must be purchased separately.
	If the application combines high humidity with cold sample water, purchase a #09944 desiccant cartridge separately.

Accessories

09950	Replacement tubing/cuvette kit
25018S	Flow through cuvette CLX

Catalog No.

	J.A.W.*	Liquid
Free Chlorine 30 day supply	09951	09947
Total Chlorine 30 day supply	09952	09948

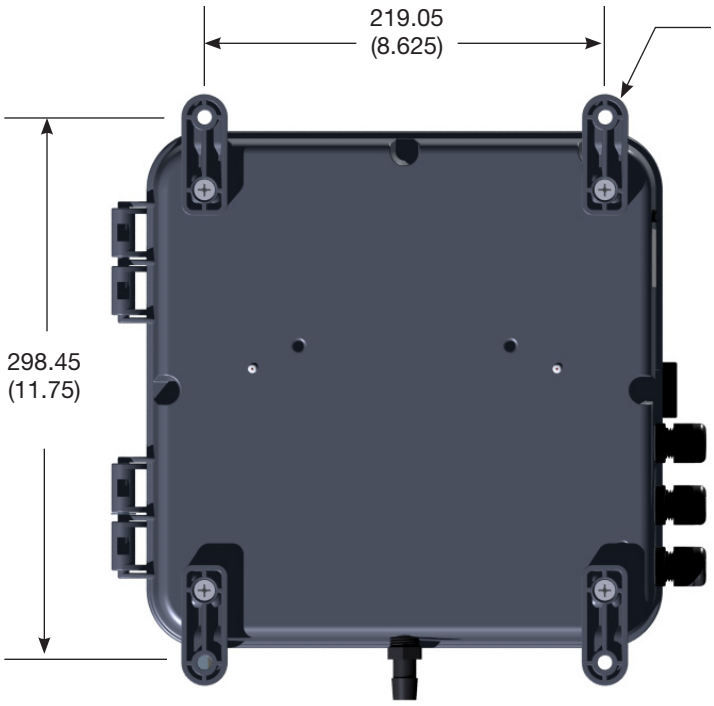
*Just Add Water

Dimensions

All dimensions are in millimeters (inches).



Front View

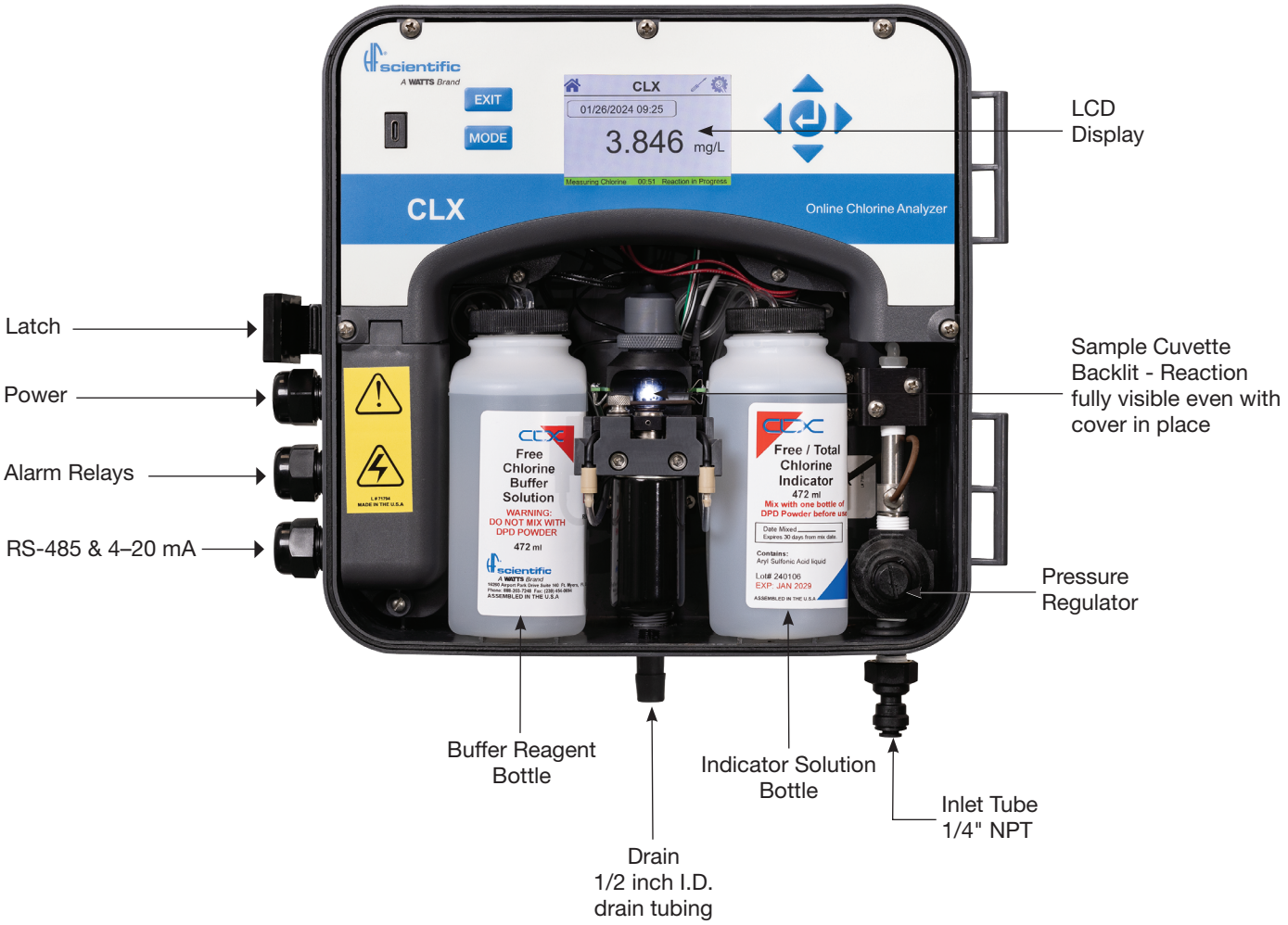


Rear View



Side View

CLX with cover removed.



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