



## LABORATORY CHARGE ANALYZER LCA-01 / LCA-02 / LCA-03

### DESCRIPTION

The Laboratory Charge Analyzer (LCA) is an essential coagulation optimization tool for the water treatment professional. The LCA allows the user to determine the ideal coagulant dosage needed to achieve optimum NTU and TOC reduction in less than 5 minutes typically, earning it the moniker “5 minute jar tester”. The process of finding the optimum dosage simply involves feeding in a measured volume of coagulant into the raw water sample until the reading on the LCA indicates complete charge neutralization has been obtained. Some pH adjustment may be required to achieve accurate test results. An option for pH measurement allows the user to also quickly determine the dosage rate of additives like lime or caustic when needed to raise the coagulation pH of low alkalinity waters. Titration of the coagulant and pH adjustment additives can be performed manually using the LCA-1, or with the touch of a button using the auto-titration features that come standard on models LCA-2 and LCA-3. The automatic titration feature further simplifies the testing process and helps ensure the most accurate results possible. Another very important feature is the large sample size capacity which allows the user to accurately titrate samples using undiluted coagulant (requires micropipette), which is the recommended method when feeding PACl or ACH. Chemtrac's Laboratory Charge Analyzer comes backed with 30 years of charge analysis expertise and world class customer support.

### STANDARD FEATURES

#### All Models (LCA-01, LCA-02, LCA-03)

- Accommodates samples from 200 to 2,000 mL
- Simple to remove probe and piston
- Includes magnetic sample stirrer

#### LCA-02

- Built-in titrator for coagulant (dilute only)

#### LCA-03

- Built-in titrators for coagulant (dilute only) and pH (base or acid)

### OPTIONAL FEATURES

- pH & Temp measurement (standard on LCA-03)
- Rollaway case for transporting unit

### BENEFITS

- Quickly determine optimum dosage of coagulant needed to achieve charge neutralization and optimize NTU and TOC removal
- Great for assessing minimum dosage of base needed to raise pH in low alkalinity waters to optimize coagulation
- Large sample size and magnetic stirrer ensures accurate results



Streaming  
Current

Chemtrac, Inc.  
1555 Oakbrook Drive  
Suite 100  
Norcross, GA 30093  
USA

PH: 770.449.6233  
US: 800.442.8722  
FX: 770.447.0889  
[www.chemtrac.com](http://www.chemtrac.com)

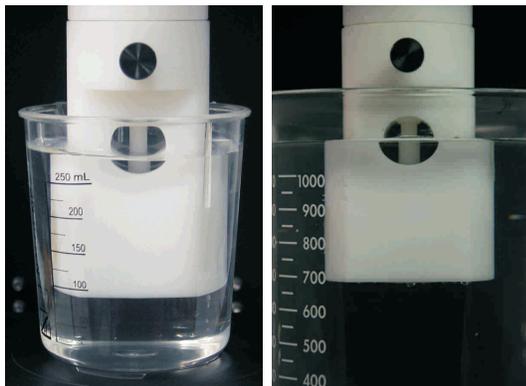
## GENERAL SPECIFICATIONS

|                              |   |
|------------------------------|---|
| Display:                     | LCD, Monochrome with backlight  |
| Sensor Type:                 | Immersion, quick connect  |
| Materials Contacting Sample: | Delrin, stainless steel (teflon optional)   |
| Sample Volume:               | 200 mL - 2000 mL  |
| Power Requirements:          | 110 VAC 60 hz, 1A<br>220 VAC 50 hz, 1A (optional)   |
| Operating Temperature:       | 34° - 120° F (0° - 50° C)   |
| Dimensions:                  | 8.5" W x 17.8" H x 9.2" D<br>(216 mm W x 425 mm H x 234 mm D)<br><br>Unit fully extended<br>8.5" W x 26" H x 9.2" D<br>(216 mm W x 660 mm H x 234 mm D) |
| Weight:                      | 20 lbs (9.1 kg)   |

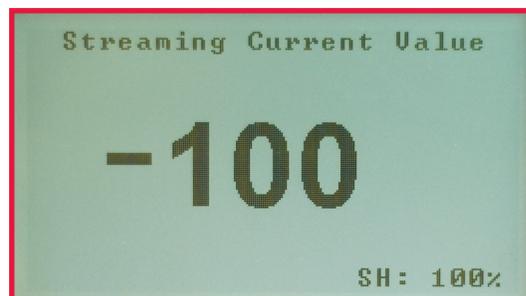
Adjustable Stand



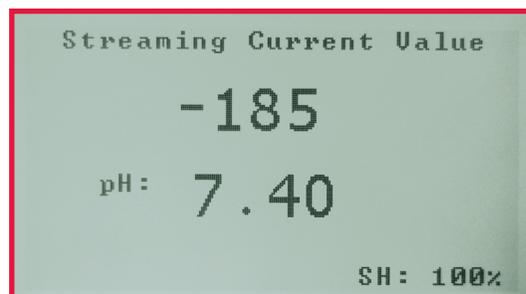
Accommodates multiple sample volumes



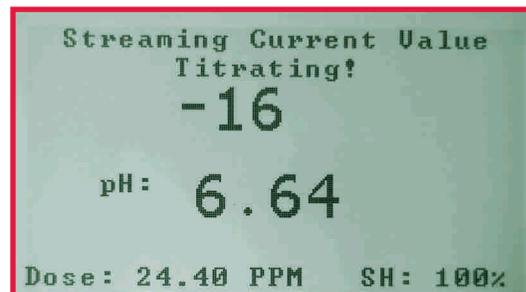
## Streaming Current Value (SCV)



## SCV with pH



## Titrating



## Titration Results

