

# LABORATORY CHARGE ANALYZER LCA5

## DESCRIPTION

The LCA5 is an essential coagulation optimization tool for the water treatment professional, allowing the user to quickly, and confidently, respond to rapidly changing raw water conditions. In under 5 minutes, the coagulant dosage needed to achieve charge neutralization can be determined by either manually or automatically titrating a raw water sample with coagulant until a zero (0) charge reading is obtained. An optional pH measurement along with automatic titration allows the LCA5 to also determine the buffer (e.g., caustic, lime) dosage in applications where pH adjustment is required due to low alkalinity conditions. The optional buffer titration feature is also utilized in certain applications where sample pH modification may be required in order to achieve reliable charge measurement results. Another very important feature is the large sample size capacity (up to 2 L), and integrated stirrer which further enhance accuracy, especially when titrating with undiluted coagulants. The LCA5 also includes graphical trending of the titration, data logging with the ability to export past titration results to a USB flash drive, and instructional videos which play directly on the 7" high resolution touchscreen display. The LCA5 comes backed with over 35 years of charge analysis expertise and world class customer support. Speak to one of our product specialists to discuss whether the LCA is the right tool for your application.

## STANDARD FEATURES

- Accommodates 1,000 to 2,000 ml sample volumes
- Integrated sample stirrer
- High resolution 7" capacitive touchscreen
- Graphical trending and data logging
- Advanced signal health diagnostics

## OPTIONAL FEATURES

- pH & Temperature measurement
- Automatic titration with coagulants and buffers (1 or 2 pumps)
- Syringe pump for neat coagulant titration
- Protective Transport case

## BENEFITS

- Quickly determine target coagulant dosage needed to achieve charge neutralization, allowing for optimum NTU and TOC removal
- Assess minimum dosage of buffer needed to raise pH in low alkalinity waters to help achieve optimum coagulation
- Large sample size, sample stirrer, and advanced signal health diagnostics ensures accurate results



# GENERAL SPECIFICATIONS

- Display: 7" capacitive touchscreen, WVGA 800 x 480
- Sensor: Streaming Current, immersion, quick connect
- Sensor Wetted Materials: Delrin, 316 Stainless Steel
- Sample Volume: 1000 - 2000 mL
- Sample Stirrer: 550 RPM direct-drive stirrer with safety clutch
- Auto Titration Pumps: Solenoid micro-pump, 50 microliter (µL) dispense volume (used with dilute chemicals)  
Syringe pump\* with minimum 0.5 microliter (µL) dispense volume (used with neat chemicals)
- pH probe\*: Glass body, 0 to 14 pH range, internal reference, ceramic junction
- Temperature\*: RTD, 316 SS Body
- Power Requirements: 100 - 240 V, 50 - 60 Hz, 1 Amp Max
- Operating Temperature: 34° - 120° F (0° - 50° C)
- Dimensions: 8.5" W x 9.5" D x 15" H (23" H Fully Extended)  
215 mm W x 241 mm D x 381 mm H (584 mm H Fully Extended)
- Weight: 16 lbs (7.3 kg)  
19 lbs (8.6 kg) with syringe pump

\*Optional items must be specified at time of ordering.

## Model Configurator

	Automatic Titration Pump Configuration	Syringe Pump Upgrade <sup>(1)</sup>	pH with Temp <sup>(2)</sup>
<b>LCA5.2</b>	0 = No Automatic Titration	0 = No	0 = No
	1 = One Titrant Pump (Coagulant Only)	1 = Yes	1 = Yes
	2 = Two Titrant Pump (Coagulant & Buffer)		

Example: LCA5.2201 comes with 2 automatic solenoid micro-pumps (one for coagulant and one for buffer), and also includes pH and Temperature measurement capability.

(1): Syringe pump upgrade is required when chemical supplier states their coagulant should not be diluted, as is the case with some pre-hydrolyzed coagulants.

(2): pH w/Temp option is required if LCA5 is configured with two titrant pumps. Note: Some applications will require the LCA5 to have two titrant pumps for sample pH adjustment capability in order to ensure accurate results. Contact Chemtrac for details.

## Home Screen



## Menu Screen



## Titration Screen



## Diagnostics Screen



## Calibration Screen

