ChargeSense
Laboratory Charge Analyzer

Pi's ChargeSense Laboratory Charge Analyzer is an essential tool for papermaking allowing fast determination of wet end charge demand.

- **Fast determination of wet end charge demand**
- **Ideal for papermaking industry**
- **Cationic and anionic titration available**
- **Manual or automatic titration available**
- **Multiple sample volumes**
- **User friendly**


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TITRATION RESULTS
Sample Vol. = 1000 ml
Titrant Vol. = 2.57 ml
PPM = 25.760
Press ANY to Continue
```

ChargeSense titration results

Pi's ChargeSense Laboratory Charge Analyzer comes backed with 30 years of charge analysis expertise and world class customer support. The ChargeSense is intuitive, flexible and gives great repeatable charge demand determinations time after time.

ChargeSense

- **Built-in titrator, two titrant pumps**
- **Cationic and Anionic titration**
- **pH measurement**
- **Temperature measurement**
- **Clear display**
- **Minimum sample of 200ml**
- **Maximum sample of 2000ml**
- **Simple to remove probe for cleaning**
- **Simple to remove piston for cleaning**
- **Includes magnetic sample stirrer**
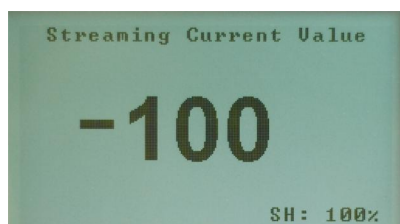- **Options:**
    - Rollaway case for transporting unit

For more information, please visit our website: http://www.processinstruments.net/products/charge-analyzer/
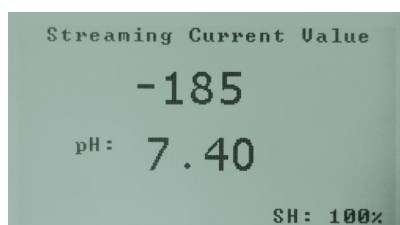
Principle of Operation

Pi's ChargeSense Laboratory Charge Analyzer measures the streaming current produced by colloidal/dissolved species in a sample taken from various points on the wet end of the papermaking process, and allows for a titration with a poly-electrolyte titrant to bring the sample's charge to zero. The charge demand result is then expressed as either microequivalents per litre (µeq/L) or parts per million (ppm).

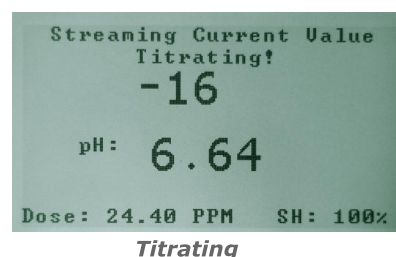*Streaming Current Value (SCV)*

pH

Knowing the pH of the samples, the titrate can give more information to the well informed papermaker. pH measurement is included on ChargeSense.

SCV with pH

Titration

The ChargeSense is equipped with two titrant pumps allowing for automatic switching between cationic or anionic titrants depending on the sample's charge.

Titrating

Sample Sizes

A very important feature is the large sample size capacity which allows the user to accurately titrate samples of varying sizes. Large samples provide for more accurate results and one more representation of the paper machine charge demand.

Accommodates multiple sample volumes

Benefits

- ● **Quickly determine charge demand of a sample.**
- ● **Allows for trending of wet end charge to aid in optimization of additives.**

Specification*

Sensor type:	Immersion, quick connect
Materials contacting sample:	Delrin, stainless steel (teflon optional)
Sample volume:	200ml-2000ml
Display:	LCD, monochrome with backlight
Dimensions:	17.8"H x 8.5"W x 9.2"D 26"H x 8.5"W x 9.2"D (fully extended)
Weight:	20lbs (9.1kg)
Electrical:	110VAC 220VAC (optional)
Operating Temp:	34° to 120°F (0° to 50°C)
Optional Accessories:	Rollaway case for transporting unit

Adjustable stand

*** All subject to change without notice**