



| TitrEC

Automate your processes  
Automate your lab  
Innovate

with **EasyPREP**  
**TitrEC**

## Automated Electro Chemistry Analyzer

Alkalinity Measurement

pH Measurement

pH Adjustment

Conductivity Measurement

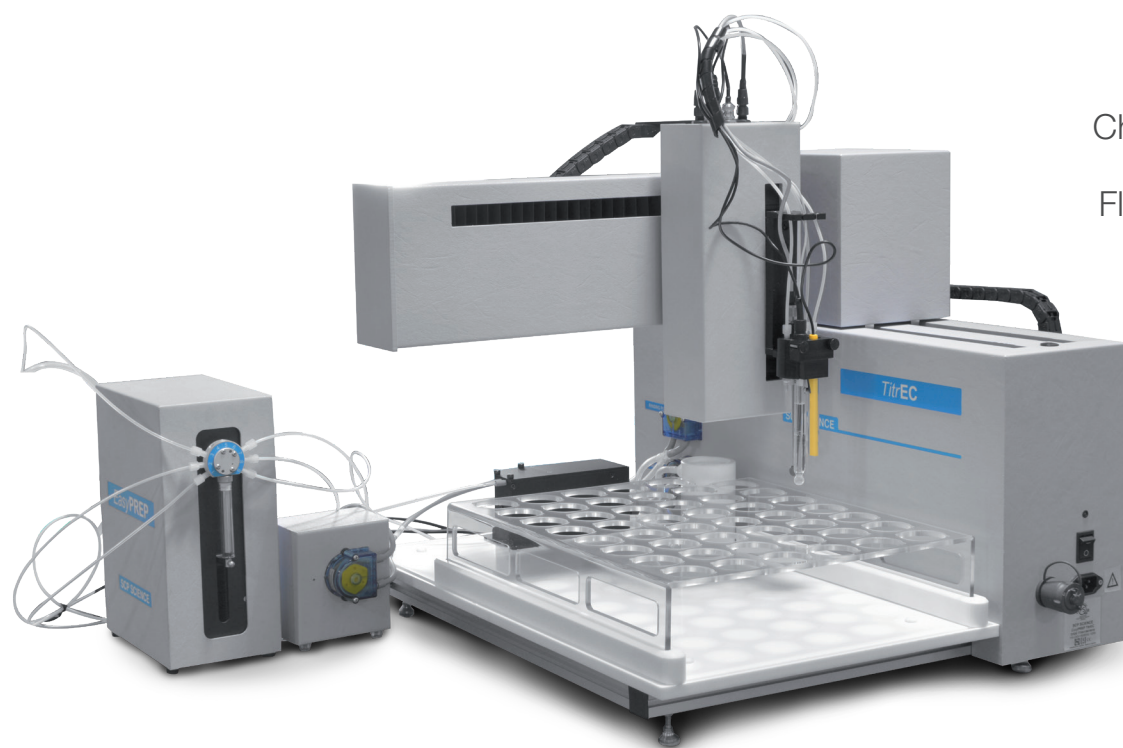
ORP Measurement

Chloride by ISE Measurement

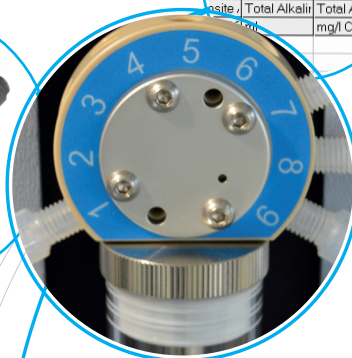
Fluoride by ISE Measurement

Turbidity Measurement

Temperature Measurement



	K	L
Sample	Total Alkalinity	Total Alkalinity
Result	mg/L CaCO <sub>3</sub>	mg/L CaCO <sub>3</sub>



# Overview

## DESIGNED FOR CONDUCTIVITY, pH, ALKALINITY, TURBIDITY, TEMPERATURE AND CHLORIDE/FLUORIDE BY ISE.

The **TitrEC** is a multi-parameter robotic platform designed for automated electrochemical measurements for large numbers of samples operating under the stringent requirements of approved methods for drinking and waste water analysis. Improved operational efficiency allows laboratories to take on new projects and reallocate personnel towards higher value tasks.

## TitrEC IS DESIGNED FOR LABORATORY TESTING OF ENVIRONMENTAL SAMPLES

# Features

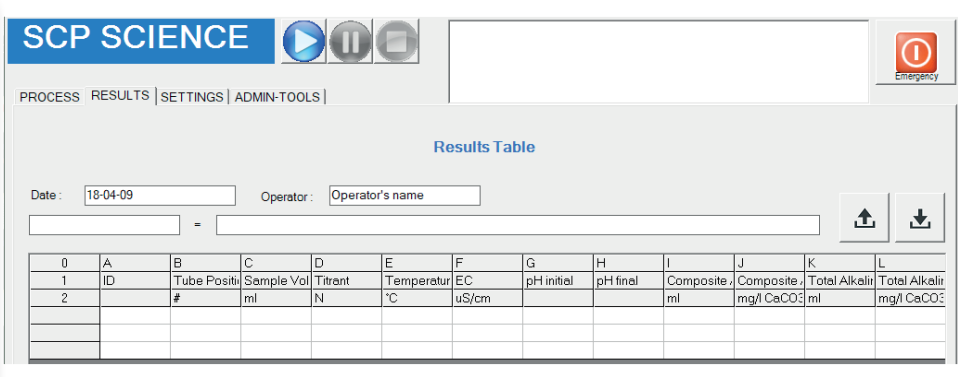
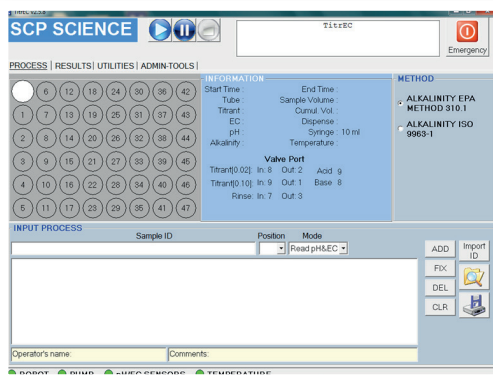
- **TitrEC** features corrosion resistant components:
  - Acid resistant housing and components
  - Acid and base dispensing using a chemical resistant 9 port valve
  - Electronic cards with special coating to prevent corrosion
- pH adjustment using an acidic or basic titrant
- Up to 9 point calibration for pH, and 2 points for EC
- Auto washing station prevents sample cross contamination
- Barcoding capability provides automatic loading of sample ID.
- User friendly software, LIMS compatible
- Accommodates 100 ml sample vessels, 47 positions
- Simultaneous pH, conductivity and alkalinity measurement provides quick generation of results

# Specifications

pH Probe		EC Probe		ORP Probe	
Measuring range:	1 – 14 pH units	Measuring range (K=1.0):	5.5-100,000 $\mu\text{S}/\text{cm}$	Range:	-1019.9 mV to 1019.9 mV
		Measuring range (K=0.1):	0.1-20,000 $\mu\text{S}/\text{cm}$		
Precision:	$\leq 0.5\%$	Precision:	$< 2\%$	Accuracy:	$\pm 1 \text{ mV}$
Accuracy:	1% of reading	Accuracy:	10% reading		
Electrode slope:	58 mV/pH units	Cell constant (K=1.0):	$1.0 \text{ cm}^{-1}$		
Resolution:	0.01 pH	Cell constant (K=0.1):	$0.1 \text{ cm}^{-1}$		
Asymmetry:	$\pm 15 \text{ mV}$				

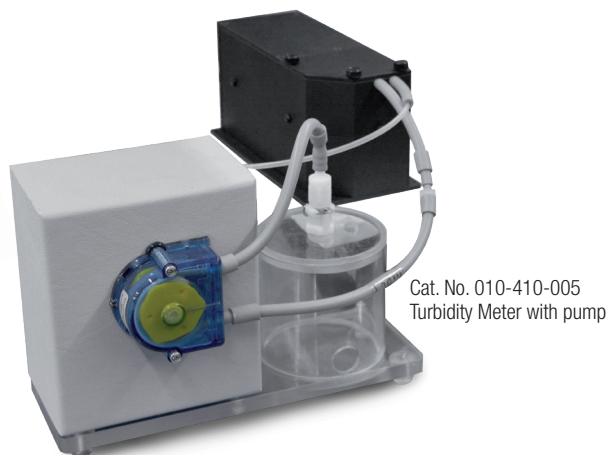
Turbidity		Turbidity	
Range	0.01 to 100 NTU	Light scattering	Measured at 90 degree
Resolution	0.01 NTU	Calibration	up to 7 standards
Reproducibility	0.01 NTU	Required sample volume	30 ml
Light source	LED, 850 nm		

Dimensions		Electrical	
Width	70 cm (27.5 in)	Voltage	100~230V
Depth	66 cm (26 in)	Power	125W
Height	69 cm (27 in)	Frequency	50/60 Hz



## Software Features

- Load pre-saved methods for fast set-up of routine operations
- Flexible method building
- Real-time visualization of run status
- Allows simultaneous multi-parameter analysis
  - Conductivity, pH, alkalinity and temperature
  - pH adjustments as part of sample preparation steps
- Preconfigured and adjustable parameters for alkalinity analysis
- Allows quick and easy setup according to standard methods
  - US EPA 310.1
  - ISO 9963-1
  - Standard Method 2320B
  - Standard Method 2310 Acidity
- Intelligent titrant addition algorithm adjusts titrant volume based on electrode response
  - Useful in pH adjustment applications
- Software-controlled pH equilibration time
- Auto stability measurement protocol
- Automatic temperature compensation for pH and conductivity measurements
- Report conductivity at 25 °C
- Report pH at 20 °C, 25 °C or other defined temperatures
- Available ISE probe for Fluoride
  - Works with 1:1 or 1:100 TISAB buffer
  - Buffer added manually
  - Measures in mV reading
  - Up to 5 points for calibration
- Available ISE probe for Chloride
  - Measures in mV reading
  - Up to 5 points for calibration
  - Buffer added manually
- Measure turbidity according to ISO 7027-1
  - Dedicated peristaltic pump with better than 1% precision
- Automatic rinsing of probes between each sample analysis
- Data export in a .csv format
  - Compatible with LIMS
- Bar coding capability
- Load sample ID lists
- Software provides sample traceability



# TitreC Ordering Information

## INSTRUMENT

Description	Catalog #
<b>TitreC</b> (110V/230V), with software	010-410-001

## ITEMS INCLUDED IN THE BASIC CONFIGURATION

Description	Catalog #
Rack for 100 ml <b>DigiTUBEs</b> , 47 positions	010-410-014
Temperature Probe	010-410-011
Blade Stirrer	010-410-016

## DISPENSING PUMP

Description	Catalog #
Syringe Pump, 1 ml, 5 ml*, 10 ml	010-400-018

\* Standard (must select syringe).

## SYRINGE

Description	Catalog #
Syringe, 1 ml	010-400-102
** Syringe, 5 ml	010-400-104
Syringe, 10 ml	010-400-108

\*\* Standard syringe for Alkalinity.

## OPTIONAL PROBE

Description	Catalog #
pH Probe	010-410-010
Conductivity Probe (K=1.0)	010-410-015
Conductivity Probe (K=0.1)	010-410-032

Description	Catalog #
ORP Probe (millivolts)	010-410-040
ISE Fluoride Probe	010-410-042
ISE Chloride Probe	010-410-044

## ACCESSORIES

Description	Catalog #
Bench Top Fume Hood, <b>EasyPREP TitreC</b> , Dimensions: 43" (109cm) x 32.7" (83cm) x 35.7" (91cm)	010-400-094
PC with Windows OS	010-400-008

Description	Catalog #
Turbidity Meter with Pump, 850 nm	010-410-005
Barcode Reader	010-600-034

## TO LEARN MORE

Please contact one of our sales representatives at [sales@scpscience.com](mailto:sales@scpscience.com) or visit our website [www.scpscience.com](http://www.scpscience.com) or contact one of our regional offices below

**ISO 17025  
and  
ISO 8655-5  
COMPLIANT**

Request Instrument Certification

SYSTEM CALIBRATION OF DISPENSING  
ACCURACY CERTIFICATION  
Catalog # 010-400-050

IMK\_EasyPREP\_TitreC\_9.0\_E

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