## Lab and Portable



#### **HCA1** Chlorine Plus Test Kit

- Measures Free and Total Chlorine
- USEPA, DIN and ISO compliant Test Method
- Photometric measurement using a 525 nm LED
- 4 ml sample cell uses 60% less chemical per test
- Easy to use, Fast and Accurate
- Waterproof rating IP67
- 0 11 ppm range



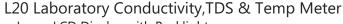


#### H10C Handheld Conductivity, Salinity, TDS & Temp

- Large LCD Display with Backlight
- Displays Conductivity, Salinity or TDS and Temp.
- 4 wire Conductivity Electrode with TC
- Calibration stored in nonvolatile memory
- Adjustable TDS and Temp. Coefficients

## H10 Handheld pH/ORP & Temperature Meter

- Large LCD Display with Backlight
- Displays pH or mV and Temperature
- Resolution of 0.1 mV in ORP or Ion Mode
- Automatic or Manual Temp. Compensation
- Automatic Buffer Recognition
- Calibration stored in nonvolatile memory



- Large LCD Display with Backlight
- Displays Conductivity or TDS and Temperature
- 2 wire Conductivity Electrodes with TC
- Calibration stored in nonvolatile memory
- Accepts 4 Cell Constants for improved accuracy

## L20 Laboratory pH/ORP & Temperature Meter

- Large LCD Display with Backlight
- Displays pH or mV and Temperature
- Resolution of 0.1 mV in ORP or Ion Mode
- Automatic or Manual Temp. Compensation
- Automatic Buffer Recognition
- Calibration stored in nonvolatile memory

Specifications subject to change without notice.

Represented by:

#### **Electro-Chemical Devices**

1500 North Kellogg Dr.

Anaheim, California, USA 92807

Phone: +1-714-695-0051

+1-800-729-1333 Fax: +1-714-695-0057

email: sales@ecdi.com web: www.ecdi.com



SF Cat D1916



## Field Proven Industrial Analytical Solutions for the Water Industries

### **About Us**

Electro-Chemical Devices (ECD) is a manufacturer of liquid analytical process instrumentation. Founded in 1977, ECD has been in business for over 35 years and has built its industry leading reputation by its commitment to our customers through this basic approach: Provide quality products, develop technical innovations and provide responsive, knowledgeable service.

Our products and services are used in some of the most demanding applications and industries, such as: Chemical, Food & Beverage, Oil & Gas, Mining, Power Generation, Pulp & Paper, Semi-conductor, Steel, Water and Wastewater. Understanding the demands of these applications, we have developed our products with unique features and technical advantages that are focused on quality, reliability, ease of use and maintenance resulting in lowering the total cost of ownership.

# Where Liquid Processes are Critical... ECD has the Application Specific Analyzers



## Field Proven Analytical Solutions for....

Water and Waste Water Management
Power Generation Industries
Drinking Water - Food & Beverage
Semiconductor Water Treatment
Petro-Chemical Refineries
Pulp & Paper - Metals & Mining
Aerospace - Military



# Complete Line of Industrial Liquid Analytical Solutions





## Solve

ECD Sensors are long lived with easily replaceable electrode cartridges that reduce maintenance time, cost and waste. There are unique field proven electrode formulations and designs for specific applications.

## Measure

ECD standard industrial products have design flexibility with materials and configurations for your specific installation requirements.

## Control

ECD products are offered as complete panel mounted products, stand alone batch analyzers, or transmitters with remote sensors.

## Support

We are here to help you to solve your requirements with our ECD support team of Chemists, Application Engineers, Service and Customer Service Specialists, and our worldwide network of trained local Sales Representatives.









## **Universal Transmitters and Analyzers**





## Plug and Play selection with any S80 Sensor

pH, ORP, pION, Dissolved Oxygen, Conductivity, Resistivity, Turbidity, Suspended Solids, Free Chlorine, Total Chlorine, Chlorine Dioxide

#### **Capabilities**

Single or Dual Channel, Digital Protocol with interactive channel calculations

#### Power

Loop, 24 VDC, 100-240 VAC

#### Communication

4-20 mA, MODBUS RTU, optional HART®7 communication

#### **Outputs**

3 SPDT form 1C relays, user configurable asHi/Lo Alarm, Fault or Timer





- Intelligent Sensor Design with digital communication
- Multiple Measurement
   Parameters
- Application Specific Electrode Cartridges
- Easily replaceable, long lived Electrode Cartridge
- Insertion, Immersion and Valve Retractable Designs
- Various Industrial Grade materials of construction

**pH Selections**: General Purpose (GP), High Temperature Cycling (HT CYCLE), High Purity Water (HPW), Non-Conductive Solutions (SUGAR), High Temperature (HT), Scrubber (SCRUB), Sulfide Resistant (SULF RES), Abrasive Slurry (SLUR), Solvent Resistant (SOLV RES), Fluoride Resistant (FLRD RES) **ORP Selections**: General Purpose (ORP), High Range (ORP-HR) **Dissolved Oxygen Selections**: General Purpose (GP-DO), Thick Membrane (TK-DO), Protected Membrane (FC-DO), part per billion (ppb-DO) **Ion Selections**: Ammonia (NH3), Ammonium (NH4), Bromide (BR), Cadmium (CD), Calcium (CA), Chloride (CL), Cyanide (CN), Cupric (CU), Fluoride (FL), Lead (PB), Nitrate (NO3), Nitrite (NO2), Potassium (K), Silver (AG), Sodium (NA), Sulfide (S)



Environmental Water Process Water



FC80 Free Chlorine, TC80 Total Chlorine, DC80 Dechlorination CD80 Chlorine Dioxide Analyzers

- No Reagents Required
- Compliant with EPA Method 334.0
- Automatic Flow Control and Large Flow Tubes eliminates clogs
- Panel Mounted System Plumb and Play Design
- Dual Measurements (2) 4 to 20 mA output, MODBUS RTU or HART communication, (3) Alarm Relays, 24 VDC or 110/220 AC Power.
- Auto Spray Cleaning Option

## TRITON® DO82 Optical Dissolved Oxygen Analyzer

- Fluorescence Quenching Optical Dissolved Oxygen Analyzer
- Intelligent Sensor with Stored Calibration Data
- ULTRA Long Life Membrane Cap provides years of service
- Membrane Cap is Easily Replaceable no need to return the sensor for factory repair
- Waterproof Fixed or Detachable Cable
- Immersion and flow through assemblies,
- Automatic spray cleaning systems.
- Interfaces with T80 Transmitter or C22 Controller



Optical Dissolved Oxygen



#### TRITON® TR86 Turbidity and Suspended Solids Sensor

- Compatible with T80 Transmitter
- Single or dual Channel
- Front Mounted or Side Mounted Optics
- Immersion, Flow Through or Valve Retractable installation
- NTU, FNU, mg/l, ppm or % Solids readout
- Intelligent Sensor with Stored Calibration Data
- Available in Three Ranges, 0-1000, 0-2000 and 0-4000 NTU

## **Turbidity and Suspended Solids**

#### HYDRA Ammonium Analyzer and HYDRA Nitrate Analyzer

- Reliable ISE Technology
- Ammonium as Nitrogen, NH4+-N
- Measurements, NH4, K, pH, Temp
- Auto Compensation for K+ interference and pH
- Nitrate as Nitrogen, NO3-N
- Measurements, NO3, Cl, Temp, NH4 or pH optional
- Auto Compensation for Chloride interference
- Rugged PVC design
- Integral Spray Cleaner





Ammonium and Nitrate



- Measurement range: Resistivity 0.00-50.00 meg-ohms Conductivity 50  $\mu$ S – 50 mS
- Temperature range: -20° 130°C (inductive 0° 80°C)
- Wetted Materials: 316L SS, PEEK, VITON
- Intelligent Sensor: Stores Identity and Calibration Information
- Insertion/Submersion with adjustable gland fittings and Valve Retractable Designs

Inductive Conductivity 100 µS - 1000 mS

- Wide Variety of Materials of Construction
- Inductive Conductivity with 3/4" entry
- Compatible with T80 Transmitter

## Conductivity/Resistivity

### TRITON® DO90 ppb Dissolved Oxygen Sensor

- 316L Stainless Steel Body and Flowcell
- Easily Replaceable Electrode Cartridge
- Galvanic, Lead Silver measurement
- Long maintenance interval
- Easy calibration, 0 ppb Sulfite Solution and Air
- Intelligent Sensor with Stored Calibration Data
- Compatible with T80 Transmitter



ppb Dissolved Oxygen



CA6 Colorimetric Analyzers - Aluminum, Ammonia, Chlorine, Chloride, Chromium VI, Copper, Cyanide, Hardness, Iron, Manganese, Nickel, Nitrate, Nitrite, Phosphate, Total Phosphate, Silica, Sulfate, Zinc

- On-line sequential sampling analyzer
- Epoxy Powder Coated Cold Rolled Steel Cabinet
- Wall Mounted standard, Bench top stand is optional
- User friendly touchscreen menu structure
- Easy configuration of cycle times and auto calibration cycles
- 4-20 mA output with two Alarm Relays, Hi/Lo Alarm, Loss of Sample, Low Reagent
- 30 Day data logging, download CSV file to USB data port

## Colorimetric Analyzer

### SMS22 Sulfide IonMonitoring System

- Sequential Sampling Measurement System, conditions, measures, neutralizes, drains and rinses
- pH Adjusted and Compensated Measurement the sample is optimized for the sulfide ion that only exists at high pH values
- ISE based provides a wide measurement range, 20 ppb to 500 ppm
- Economical, easily replaceable electrode cartridges
- Sample Neutralized After Measurement the highly caustic sample pH is reduced to a safe level near pH 8
- Easily adjustable from 2 samples per hour to 10 samples per hour.
- Low Reagent Consumption



Sulfide Ion Analyzer