

STREAMING CURRENT CHARGE ANALYZER HydroACT with DURATRAC 3

DESCRIPTION

The **HydroACT Analyzer** with **DuraTrac 3 Streaming Current Sensor** provides an economical solution for coagulant feed monitoring and optimization. The versatile capabilities of the HydroACT platform allows the user the option to add on additional sensors to measure other key variables to coagulation such as pH, UV254 (organics), and NTU. A well designed graphical user interface gives the user easy access to frequently used features like zero offset, provides an intuitive user menu, and offers diagnostic readouts, service reminders, and alarms. Contact Chemtrac to discuss your application and let us provide a solution that meets your requirements.

STANDARD FEATURES

- Includes analyzer, DuraTrac 3 sensor, 1 analog output, and 25 feet of interconnect cable
- 0.2 to 5 gpm sample flow capability
- Quick-replacement probe and piston
- Easy push button zero offset

OPTIONAL FEATURES

- Expandable sensor inputs and I/O
- Up to 1000 feet of interconnect cable
- Chemical feed control outputs
- Data logging with MicroSD download
- Modbus or PROFIBUS communications
- Color display
- Remote (internet) access

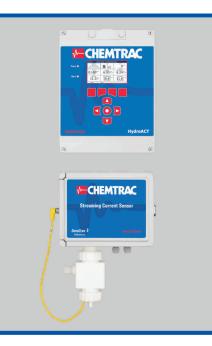
BENEFITS

- Capability of incorporating multiple measurements that are key to coagulation, such as pH, TSS/NTU, and UV254 organics
- Multiple chemical feed control options with overfeed protection, start delay, setpoint ramping, and other advanced features
- State of the art features like signal health diagnostics and pH compensation provides improved performance and reliability

APPLICATIONS

Water Treatment

- Respond quickly to NTU/organics changes
- Optimize coagulant usage
- Reduce sludge generation
- Improve clarifier performance
- Extend filter run time
- Reduce membrane fouling
- Monitor for overfeed of filter aids



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GENERAL SPECIFICATIONS

HydroACT Analyzer

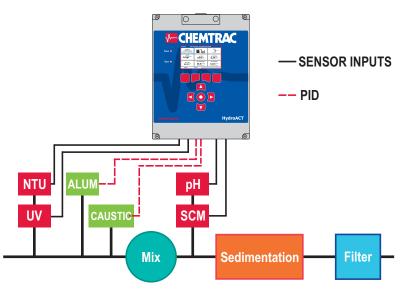
The HydroACT Streaming Current Analyzer standard configuration includes version HA2 analyzer, 1 DuraTrac 3 sensor, 1 analog output, and 25 feet of interconnect cable. Optional features include relays, digital inputs, digital communications, expanded number of sensor inputs and analog outputs, color display, and data download capability. Maximum I/O capabilities and certain features are specific to the different versions of HydroACT as detailed below.

HydroACT Features	HA2	HA4	HA8
Sensor limit*	2	4	8
Analog output limit*	2	4	8
Relay limit*	4	8	16
Digital input limit*	4	8	16
Color display		•	•
Data logging and download		•	•
On/Off threshold Control	optional	optional	optional
Andvanced control (e.g. PID)	optional	optional	optional
Remote (internet) access		optional	optional
PROFIBUS, Modbus		optional	optional

*Optional configuration limits. See above description for standard configuration of analyzer version & I/O setup. Optional configurations must be specified.

Sensor Options:	Free CI, Total CI, CI Dioxide, Chlorite, Ozone, ORP, pH with Temperature, DO, Conductivity, SCM, UV254 Organics, TSS/NTU, Particle Counter
Available Output Type:	4-20mA
Relays (optional):	SPST electromechanical relays rated for 380 VAC, 6A max.
Alarms & Thresholds:	2 user-configurable alarms and 2 user- configurable thresholds (for control)
Chemical Feed Control (optional):	HA4 & HA8 only - PID, Feed Forward, Flow Proportional, Timer - multiple loops
Communication (optional):	Modbus ASCII/RTU (RS485), Modbus TCP (Ethernet), Profibus DP
Data Logging (optional):	Customizable data logs. 1 million records can be logged internally, and downloaded to MicroSD card.
Enclosure:	ABS flame retardant, IP65, Nema 4X
Display:	4.3", 480x272, 24 bit, grayscale Optional: color (HA4 & HA8 only)
Dimensions:	HA2 & HA4 - 9.0" W x 12.2" H x 4" D (230 mm W x 309 mm H x 1035 mm D) HA8 - 18.0" W x 12.2" H x 4" D (460 mm W 309 mm H x 1035 mm D)
Weight:	HA2 & HA4 - 4.5 lbs (2 kg)
0	HA8 - 9 lbs (4 kg)

Example Installation Diagram



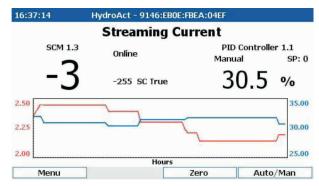
DuraTrac 3 Streaming Current Sensor

Range:	-1000 to +1000	
Signal Gain:	User-adjustable, 1 to 600x	
Zero Offset:	User-adjustable	
Sample Flow Rate:	1 to 40 Liters per minute	
Gain & Zero Offset:	User-adjustable, Manual or Automatic	
Repeatability (Cond. Range)*:	Better than 2% from (10 to 250 uS) Better than 3% from (250 to 500 uS) Better than 5% from (500 to 1,000 uS)	
Max Pressure:	Less than 5 psi (requires atmospheric drain)	
Probe Type:	Quick-replacement cartridge	
Piston Type:	Quick-replacement	
Sample Connections:	Inlet 0.75" (19 mm) OD, barb type	
Materials Contacting Sample:	Delrin, nylon, neoprene, viton, stainless steel	
Wiring Connections:	1 ea. shielded, 4 conductor, 18 AWG	
Self Diagnostics:	Motor, opto switch	
Power Requirements:	110 VAC, 1 A, 60 Hz 220 VAC, 1 A, 50 Hz (optional)	
Enclosure:	NEMA 4X, fiberglass reinforced	
Operating Temperature:	34° - 120° F (1° - 49° C)	
Dimensions:	9.2" W x 7.2" H x 5.3" D (234 mm W x 183 mm H x 135 mm D)	
Weight:	10 lbs (4.5 kg)	
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Optional Accessories

Automatic Sensor Flush:	Sensor flush only
Remote Internet access with em	ail alerts

Streaming Current Home Screen



HydroACT Graph Screenshot

