Ballast Water
Online TRO and Chlorine Monitoring Solutions
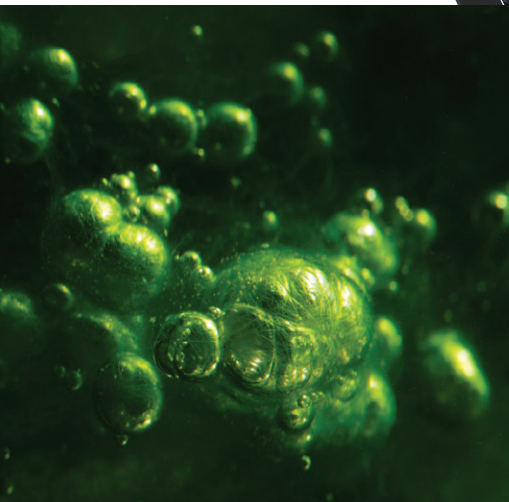
HF scientific

A **WATTS** Brand

About Ballast Water

Ballast water is essential for safe, efficient shipping operations and to stabilize steel-hulled vessels at sea. Ballast maintains balance, stability, and structural integrity when cargo is loaded and unloaded, and is also used to compensate for the weight differences caused by fuel during at-sea operations.

When a ships' ballast water carries and transports marine species to new location, it can cause significant ecological, economic, and health problems. Once bacteria, eggs, cysts, or larvae of various marine species are transferred from their native environment to a new geographic area, they can reproduce and become invasive, quickly out-competing native species and multiplying into pest proportions. The International Maritime Organization recommends DPD colorimetric measurement as the preferred method for TRO.

At HF scientific, we're committed to improving the quality of the world's water supply by designing and manufacturing innovative devices that accurately measure and assess water quality. Our durable, easy-to-use instrumentation provides precise measurement of the TRO (Total Residual Oxidant) of ballast water equipment on board. Partner with us for innovative, comprehensive water quality and measurement solutions for all your offshore needs.

SSR-Ex
Online TRO and Chlorine Monitor for Hazardous Environments

SSR-Ex

Standard Features

- Safe, simple, and robust
- Cycle times as low as 45 seconds
- Calibration Kits available
- 2 user settable alarm relays
- 4-20 mA and Modbus outputs
- Enclosure emergency drain
- Internal sample pump

Certifications

CE, UL, CSA, USCG, DNVGL, IECEx, ATEX (Zones 1 and 2)

Ordering Information

Part Number	Description
28037	SSR-Ex Online TRO and Chlorine Monitor for Hazardous Environments
09931	Total Chlorine Liquid Reagent Kit (30 Day Supply)
24320S	Pressure Regulator (Inlet Water)
28139	Air Filter/Dryer Assembly (Air Prep Kit)
28140S	Air Filter/Dryer Element Replacement Kit
28141S	Replacement Peristaltic Pump Head
28142S	Reagent Tubing
28143S	T-Strainer/Pressure Regulator Assembly
28144S	Calibration Kit
28145S	Replacement T-Strainer Screen
28165	Total Chlorine Liquid Reagent Kit (12 Month Supply)

SSR-Ex with door open

CLX Ex | CLX Ex2
Extended Reagent Life Online TRO and Chlorine Monitor for Hazardous Atmospheres

Standard Features

Designed for atmospheres where combustible fuel and vapors may be present

- Suitable for Class 1, Zone 1 and Zone 2 environments
- Designed for unattended operation up to 90 days depending on sample cycle times and BWMS monthly operation times
- 4-20mA and RS-485 with Modbus output
- 316 stainless steel enclosure (CLX-Ex) or stainless steel enclosure with viewing window (CLX-Ex2)
- Remote standby is standard for both the Ex and Ex2

Certifications

CLX-Ex – USCG, DNVGL, CE, IECEx, ATEX, UL/CSA
CLX-Ex2 – USCG, DNVGL, CE, IECEx, ATEX, UL/CSA

Ordering Information

Part Number	Description
A28031	CLX-Ex Online TRO and Chlorine Monitor with operating manual (Reagents must be purchased separately.)
28034	CLX-Ex2 Online TRO and Chlorine Monitor with operating manual (Reagents must be purchased separately.)
09950EX	Replacement Tubing/Cuvette Kit
09991	Total Chlorine Liquid Reagent – 12 Month Supply (based on estimated BWMS operational cycles)
28895	High Range Option 0-15 mg/l
28896	60 seconds to 10 minute cycle time

CLX-Ex

CLX-Ex2

CLX XT | CLX XT2
Extended Reagent Life Online TRO and Chlorine Monitor

CLX XT

Standard Features

- Optimized for high temperature marine applications
- Integrated cooler extends reagent life to 3 months
- Designed for unattended operation up to 90 days (depending on cycle time at ambient temperatures up to 50°C)
- User selectable alarms for sample concentration
- 4-20mA and RS-485 with Modbus output
- Shatterproof IP66 case, except fan (IP54) (CLX-XT)
- Steel-Coated IP56 case, except fan (IP54) (CLX-XT2)

Certifications

CLX-XT – CE, UL, CSA, USCG
CLX XT2 – CE, UL, CSA, USCG, DNVGL

CLX-XT2

Ordering Information

Part Number	Description
28030	CLX-XT Extended Reagent Life Online TRO and Chlorine Monitor with operating manual (Reagents must be purchased separately.)
28030RST	CLX-XT Extended Reagent Life Online TRO and Chlorine Monitor with operating manual with Remote Standby (Reagents must be purchased separately.)
28048	CLX-XT2 Extended Reagent Life Online TRO and Chlorine Monitor with Operating Manual. (Reagents must be purchased separately.)
09950EX	Replacement Tubing/Cuvette Kit (CLX-XT2)
09994	Total Chlorine Dry Reagent - 12 Month Supply (based on estimated BWMS operational cycles)
25279	Auto Drain
28895	High Range Option 0-15 mg/l
28896	60 Seconds to 10 minute cycle time
Call	Replacement Tubing/Cuvette Kit (CLX-XT2)

CLX-XT2 with door open

AccUView LED Ex
Online UV Analyzer for Hazardous Environments

AccUView LED Ex

Standard Features

- Certified for operation in IECEx and ATEX Zone 1
- IECEx approved purge/pressurization controller – Air Sentinel III
- UVC LED light source – longer life and mercury-free
- 4-20 mA and Modbus outputs
- Bubble rejection system designed to eliminate air in the sample
- Ultrasonic autoclean system designed to reduce operator maintenance time

Certifications

DNVGL, USCG, IASC UR E-10, IECEx, CE, UL

Ordering Information

Part Number	Description
28044	AccUView LED Ex Online UV Monitor for Hazardous Environments with operating manual
19323	100%T Calibration Solution – 500ml
19978	Optional Flow Regulator, 1000ml/min
21062	Tubing Kit (1 shutoff clamp, 1 back-pressure valve, 2 connecting tubes with fittings for flow through assembly, drain vent)
24232S	Replacement Quartz Cuvette with Ultrasonic Transducer
24306S	Replacement Pressure Regulator
28161	Air Prep Kit with Dryer
28474	Replacement UV LED Assembly
100125	Operation Manual, AccUView LED Ex
H110070	Replacement AccUView LED for Ex
H110083	AccUView LED for Ex Electronics Service Module

AccUView LED Ex with door open

AccUView LED
Online UV Analyzer

AccUView LED

Standard Features

- UVC light source – longer life and mercury-free
- 2 measurement scales – %Transmission and Absorbency
- 4-20 mA and Modbus outputs
- Bubble rejection system designed to eliminate air in the sample
- Ultrasonic autoclean system designed to reduce operator maintenance time

Ordering Information

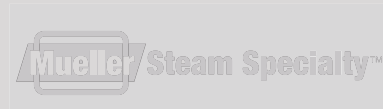| Part Number	Description
28041	AccUView LED Online UV Monitor, 100-240 VAC with operating manual
28042	AccUView LED Online UV Monitor with Flow Alarm, 100-240 VAC with operating manual
19323	100%T Calibration Solution – 500ml
21062	Tubing Kit (1 shutoff clamp, 1 back-pressure valve, 2 connecting tubes with fittings for flow through assembly, drain vent)
24232S	Replacement Quartz Cuvette with Ultrasonic Transducer
24306S	Replacement Pressure Regulator
28474	Replacement UV LED Assembly

Watts Family of Brands

Watts designs, manufactures, and sells an extensive line of flow control, water safety, water filtration & treatment, drainage, and PEX plumbing products.

The Watts family of companies provides a single source for solutions used to safely convey, conserve, and manage water.

Making Watts your single source for plumbing-related solutions will streamline your operations, save you money, and reduce the variety of repair parts needed for maintenance.

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AMES FIRE & WATERWORKS

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FEBCO®

HF scientific

Mueller Steam Specialty™

ORION®

POWERS™

Premier™

PVi®

SunTouch®

tekmar®

WATTS®

Contact Information

To Order:

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Email:	hf.info@wattswater.com
Hours:	Monday through Friday
	8:00 am to 4:30 pm EST

For faster order processing, please include:

Your HF account number or billing zip code, shipping address, billing address, purchase order number, shipping instructions and details of the order including HF part numbers.

Warranty Information

Scan for more info

We Accept

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