

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

AccUView LED Ex

Online UV Monitor for Hazardous Environments

HF scientific has developed the AccUView LED Ex Online UV Analyzer specifically for ATEX Zone 1 hazardous areas aboard ships. The AccUView LED Ex is the most reliable and cost efficient instrument for monitoring the %Transmission and Absorbance of a disinfection system.

The AccUView LED Ex is equipped with an IECEx approved purge/pressurization controller called the Air Sentinel III. This allows the monitor to safely measure the UV transmittance or absorbance of process water online while in a hazardous environment, Zone 1.

Standard features include simple calibration procedures, a bubble rejection system, an ultrasonic autoclean system designed to reduce operator maintenance time and selectable scaling of %Transmission or Absorbance.

Features

- Certified for operation in IECEx & ATEX Zone 1
- IECEx approved purge/pressurization controller - Air Sentinel III
- UVC LED light source - Longer life and mercury free
- Two measurement scales - %Transmission and Absorbance
- Communications - Standard communications include 4-20mA with isolator or RS-485 with Modbus protocol
- Certified Standards - HF scientific certified 100%T Calibration Standard

Bubble Rejection System

Optical chamber has been designed to eliminate air in the sample while simultaneously creating a vortex cleaning action throughout the optical chamber.



AccUView LED Ex

Certified Traceable Standards

HF scientific certified the 100%T Calibration Standard is prepared as outlined in Standard Methods for the Examination of Water and Wastewater, 20th Edition, Method 1080 A-C, Methods for Preparation of Reagent Water.

Response Time

Adjustable response time allows user to program readings to be taken between 4 and 60 seconds.

Backlight Display

User adjustable backlight display allows viewing in low light conditions.

Certification

ATEX, IECEx, USCG, DNVGL, listed or certified to UL, CSA (ETL, ETLc)

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Specifications

The continuous monitoring system shall include a single modular unit with power supply, display and sensor as one unit inside a 316 stainless steel enclosure that is ATEX/IECEX certified for use in Zone 1. The analyzer shall be Modbus compatible and have a full time automatic ultrasonic autoclean system for ocean and fresh water applications. Resolution will be 0.1 %T. Repeatability shall be plus or minus 1%T.

The sensor shall consist of a rotational flow through assembly with a 30ml cuvette. The specially designed flow head bubble rejection system eliminates the need for a bubble trap and ensures an immediate response time. The sensor shall be able to accommodate grab samples. Calibration and standardization will be accomplished using a small volume (30ml) cuvette. The lamp source and detector shall not come in contact with the sample. The analyzer shall use menu driven software for ease of use. The analyzer enclosure shall be IP55.

Measurement Range	0 – 100.0 %T 0 – 2.0 ABS
Repeatability	± 1.0 %T ± 0.002 ABS
Resolution	0.1 % T 0.0004 ABS
Accuracy	± 2.0 % T ± 0.008 ABS
Response Time	User selectable from 4 to 60 seconds
Path Length	21.5 mm
Display	Multi-Line Liquid Crystal Backlit Display
Analog Output	Powered loop isolator 4-20 mA, 600 Ω drive (either 4-20mA or Modbus can be used)
Communications Port	Bi-directional RS-485 with Modbus (either 4-20mA or Modbus can be used)
Maximum Water Pressure	1380 kPa (200 psi.) with integral pressure regulator
Flow Rate	100 ml/min. – 1.5 liter/min. (.026-.26 Gal/min) flow switch set for 150 ml/min.
Operating Temperature	0°C – 55°C (32°F – 131°F)
Wetted Materials	Nylon, Quartz, Silicone, Polypropylene, Stainless Steel, Polyethylene, NORYL®, Ryton, Fluorocarbon, PVC
Sample Temperature Range	0°C – 50°C (34°F – 122°F)
Power Supply	100– 240 VAC, 47 – 63 Hz, 90VA
Insulation Rating	Double Insulated, Pollution Degree 2, Overvoltage Category II
Environmental Conditions	IP55 Rated - The unit is intended for indoor use. Altitude up to 2000 meters Up to 95 % RH (non-condensing)
IECEX Hazloc Rating	Ex pxb IIC T4 Gb 0°C ≤ Ta ≤ 55°C Ex = Explosion protected pxb = Keeps dangerous atmosphere outside by overpressure, mandatory power off when pressure drops IIC = Gas group (classified as most dangerous gases) T4 = Temperature classification Gb = Zone 1 (gas) 0°C ≤ Ta ≤ 55°C = Ambient Temperature Range
IECEX File #	IEC Ex LC 19.0013X
Compressed Air Requirements	Water and oil-free, Particles <5u, ISA Grade Hydrocarbon Free. Full time clean dry air at 5.5 - 7 bar (80 - 101.5 PSI) @ 35 SLPM (1.2 SCFM) @ 20oC (68oF) Max
Regulatory Compliance And Certifications	DNV-GL, USCG, IASC UR E-10 Rev 7, IECEX, ATEX, CE, UL 61010-1 (Ed. 3) and CAN/CSA C22.2 No. 61010-1-12 (R2017)
Shipping Weight	27.2 kg (60 lbs.)

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Ordering Information

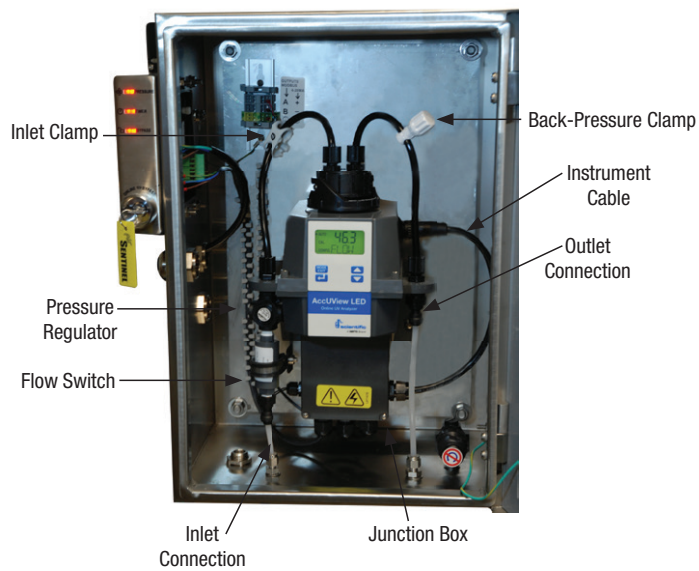
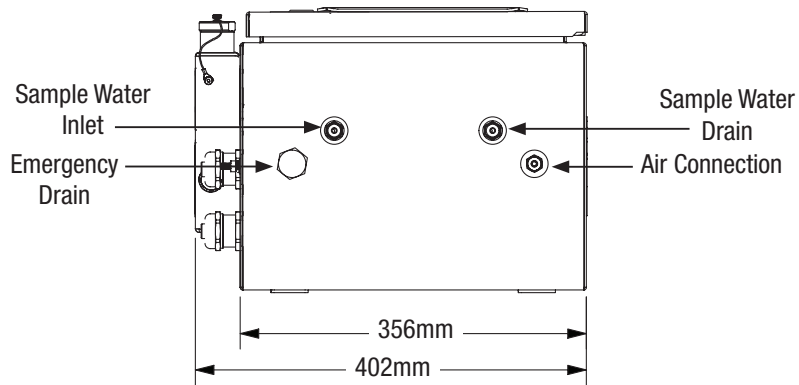
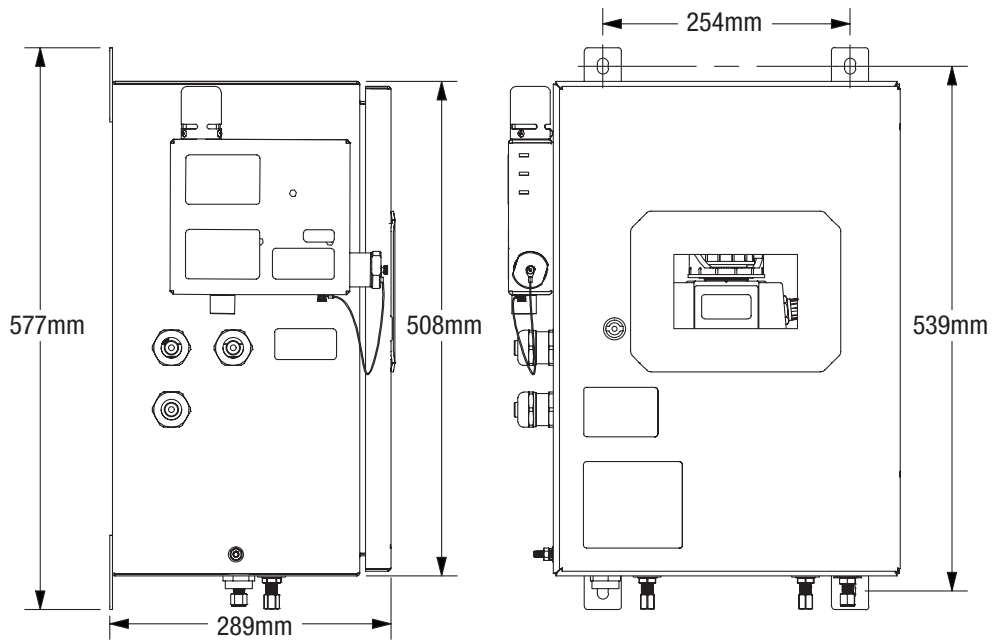
MODEL	DESCRIPTION
28044	AccUView LED Ex Online UV Monitor for Hazardous Environments

Accessories

PART#	DESCRIPTION
19323	100%T Calibration Solution - 500ml
21062	Tubing Kit (1 shutoff clamp, 1 back-pressure valve, 2 connecting tubings 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
110070S	Replacement AccUView LED for Ex
110083S	AccUView LED for Ex Electronics Service Module

To order any accessories or replacement parts, please contact HF scientific's Customer Service Department.

Dimensions



A WATTS Brand

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 Latin America: T: (52) 55-4122-0138 • HFscientific.com