



# ChemScan UV-2250/S Chloramination Analyzer

## FOR ONLINE, REAL-TIME WATER ANALYSIS

The ChemScan UV-2250/S Chloramination Analyzer provides operators with timely process chemistry measurements to optimize the difficult-to-control chloramination process. The analyzer provides data to ensure proper disinfection while minimizing disinfection by-products (DBPs) and nitrification potential. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality.

The ChemScan UV-2250/S is equipped with a Graphic User Interface built to handle the challenges of a municipal/industrial environment. The display simplifies navigation making the analyzer user friendly. Large display numbers allow the operator to view current parameter values at a glance. And maintenance and troubleshooting videos can be accessed and viewed on the display.

## BENEFITS

- Ensure proper disinfection concentrations
- Minimize disinfection by-products
- Reduces distribution nitrification
- Avoid taste and odor complaints
- Control energy and chemical costs
- Improve process performance

## AVAILABLE PARAMETERS

- Free Ammonia
- Total Ammonia
- Monochloramine
- Total Chlorine

## ANALYZER FEATURES

- Simple to use and maintain
- Designed for the harsh in-plant operating environment
- Reagent-assisted, multiple-wavelength UV absorbance technology ensures accuracy across varying water conditions
- Clog-proof, internal, multi-sample line manifold
- Automatic zero and cleaning eliminates electrical/optical drift and flow cell fouling
- Benign, inexpensive reagents
- No ion-specific electrodes to clean or replace
- Multiple data communication options with plant SCADA

## INTERFACE FEATURES

- Industrial hardened interface
- Local data visualization for simplified use
- Auto fault detection, auto recovery
- Graphic representation of system operation
- Multiple user levels; log of user changes
- Recover to factory default setting
- Upgradeable via USB port

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## Applications:

- WATER MONITORING IN MUNICIPAL ENVIRONMENT
- WATER MONITORING IN INDUSTRIAL ENVIRONMENT

FUNCTIONS AND OUTPUTS	
ANALYZER OPERATION	Automated, Continuous Analysis of Drinking Water
MEASUREMENT PRINCIPLE	Reagent-Assisted, Multiple-Wavelength UV Absorbance Technology Using Pattern Recognition of Spectral Data
NUMBER OF PARAMETERS	Four per Sample Line
PARAMETER OPTIONS	Free Ammonia, Total Ammonia, Monochloramine, Total Chlorine, UV Absorbance or Transmittance
DATA COMMUNICATIONS	4-20 mA (4 outputs per sample line max.), Modbus RTU, Modbus TCP/IP, EtherNet/IP
DATA LOG	Time Date, Concentration, Diagnostic Info, Calibration Spectra
NUMBER OF SAMPLE LINES	1 or 2 through Internal Manifold, Two Standard, see UV-6101 if more required
REAGENT DETECTION	YES (Standard)
AUTO MAINTENANCE	YES (Standard)

SAMPLE PARAMETERS	
SAMPLE PRESSURE	Pressurized Sample Lines Regulated to Less Than 2-50 psi (14 - 345 Kpa) (Adjustable Pressure Regulators Provided) (Unpressurized Optional)
SAMPLE FLOW	0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)
FILTRATION REQUIREMENT	None
STRAINER REQUIREMENT	#20 Mesh - Opening of 0.69 mm (0.027 in) Provided
SAMPLE TEMPERATURE	50 - 140°F (50 - 140°F)
SAMPLE TURBIDITY	0-10 NTU

OPERATING ENVIRONMENT	
ENCLOSURE RATINGS	Upper Enclosure: NEMA 4 (NEMA 4X Optional, 316 SS) Lower Enclosure NEMA 3R (Optional, 316 SS) (shielded spill drain)
AMBIENT TEMPERATURE	41 - 113°F (5 - 45°C)
RELATIVE HUMIDITY	0 - 100% (Non-Condensing) For Installation in an Indoor or Sheltered Location

PERFORMANCE SPECIFICATIONS <sup>2</sup>	
READING INTERVAL	10-9999 Minutes
RESPONSE TIME	10 Minutes for the Entire Four-Parameter Suite
ACCURACY	+/- 0.02 or 2% (whichever is greater), Parameter Specific
PRECISION	Less than 0.5% of Range
ZERO DRIFT	Less than 0.5% of Range (with Auto Zero)
RANGE	Free Ammonia 0.02 - 1.00 mg/l as N Total Ammonia 0.02 - 2.00 mg/l as N Monochloramine 0.05 - 5.0 mg/l as Cl <sub>2</sub> Total Chlorine 0.05 - 5.0 mg/l as Cl <sub>2</sub> Transmittance 0 - 100% T, Absorbance 0 - 3.000 AU (Higher Ranges Available)

INSTRUMENT SPECIFICATIONS	
SIZE	102 x 51 x 26 cm (40 x 20 x 10 in)
WEIGHT	130 lbs (59 kg)
FINISH COATING MATERIAL	Polyurethane Enamel over Polyester Urethane on Steel (Standard) or Type 316 Stainless Steel (Optional)
POWER	120 VAC ±10%, 50-60 Hz, 4 Amps maximum
POWER CONNECTION	Hard Wired (Standard) or Plug (Optional)
POWER CONDITION	Dedicated Branch Circuit Free From: Surges/Dips > 10%, RF and Switching Noise
OPERATOR INTERFACE	17.8 cm (7 in) TFT, LCD, Touch HMI Panel
SAMPLE CONNECTION	¼ in FNPT Fitting
WASTE CONNECTION	¼ in FNPT Fitting (Open Drain Required)
MOUNTING	Wall (Standard) or Stand (Optional)

MAINTENANCE	
LIGHT SOURCE REPLACEMENT	Every 4 years
ZERO & CLEANING SOLUTIONS REFILL	As Required (4 weeks typical)
REAGENTS REFILL	As Required (4 weeks typical)

ACCESSORIES	
Sample handling and conditioning accessories are available for this analyzer	

Step-by-step maintenance and troubleshooting videos can be viewed on the display, simplifying the service process with graphic representation of the system's operation.



#### Notes:

1. Technical Specifications are subject to change without prior notice.
2. All performance specifications are based on analysis of drinking water standards under factory conditions.