



Chloramination Process Monitoring

MONO	3.25
TNH3-N	0.69
FNH3-N	0.04
RATIO	4.71



ChemScan mini ChlorAm Chloramination Analyzer

For Reliable, Real-Time Water Analysis

The ChemScan mini ChlorAm Chloramination Analyzer provides operators with timely process chemistry measurements to optimize the challenging chloramination process. The analyzer provides data to ensure proper disinfectant while minimizing disinfection by-products (DBPs) and nitrification potential in drinking water distribution systems. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality. The mini ChlorAm Analyzer is well suited for drinking water and wastewater chloramination applications.

The mini ChlorAm Analyzer monitors multiple parameters in the Chloramination process; Monochloramine, Total Ammonia, and Free Ammonia, while calculating the Cl₂:N ratio.

The analyzer incorporates 15 years of ChemScan Chloramination experience and proven technology. Unlike other analyzers, discharge is non-toxic and no mandatory service contract is required.

BENEFITS

- Reliable chloramination process control to minimize DBP's
- Minimized dichloramine to reduce taste and odor complaints
- Reduced need for frequent laboratory analysis
- Lowest capital and operational cost
- No service contract required



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FEATURES

- Low maintenance
- Proven sample handling with large sample lines to minimize blocking
- Easy to maintain with intuitive sample flow
- Components are designed for easy accessibility
- Integrated self cleaning to remove buildup in flow cell and sample lines
- Simplified analysis cycle reduces the number of moving parts
- Field analysis using proven methods
- Sample blank to eliminate background interference
- Simple field-adjustable calibration

PARAMETERS

- Monochloramine
- Total Ammonia
- Free Ammonia
- Chlorine-to-Ammonia Ratio

CAPABILITIES

- Automatic analysis of critical chloramination parameters
- Reduces potential for nitrification
- Minimizes disinfection by-products
- Provides reliable analysis in drinking water and wastewater processes

Applications:

- CHLORAMINATION PROCESS MONITORING AND CONTROL
- POTABLE WATER, DISTRIBUTION BOOST AND BLEND
- WASTEWATER CHLORAMINATION MONITORING

TECHNICAL SPECIFICATIONS¹

FUNCTIONS AND OUTPUTS	
ANALYZER OPERATION	Automated, continuous analysis of drinking water or wastewater
MEASUREMENT PRINCIPLE	Reagent assisted optical absorbance at 660 nm with sample blank correction
NUMBER OF PARAMETERS	Four Parameters
PARAMETER OPTIONS	Monochloramine, Total Ammonia, Free Ammonia, and Cl:NH ₃ Ratio
ALARM OUTPUTS SPDT, 5 AMP, INDIVIDUALLY FUSED	Alarm 1: High/low concentration Alarm 2: Programmable, high/low concentration or operates with sample valve (for external sample pump)
DATA COMMUNICATIONS	4-20mA (4 outputs)
ALARMS	Four Dry Contact Concentration Alarms, Four Status Outputs
DATA LOG	10,000 Values - Time Date, Concentration, Diagnostic Info, Calibration Spectra
NUMBER OF SAMPLE LINES	One Sample Line
AUTO MAINTENANCE	Automatic Flow Cell and Sample Line Cleaning
CALIBRATION	Factory calibrated for reagent response, field adjustable
SAMPLE PARAMETERS	
SAMPLE PRESSURE	Pressurized Sample Line Required Regulated to 2-10 psi (15-70 kPa), (For wastewater, sample extraction accessory available - Pump and Sample Circulation Loop Assembly)
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	For samples with more than 150 mg/l TSS
STRAINER REQUIREMENT	#20 Mesh - Opening of 0.7 mm (0.027 inches) Provided
SAMPLE TEMPERATURE	10 - 60°C (50 - 140°F)
SAMPLE TURBIDITY	0-60 NTU
OPERATING ENVIRONMENT	
ENCLOSURE RATINGS	Upper Enclosure: NEMA 4X (Fiberglass Reinforced Plastic) Polyester, Acrylic window. Lower Enclosure NEMA 4X (Fiberglass Reinforced Plastic) Polyester
AMBIENT TEMPERATURE	5 - 45°C (41 - 113°F) (Temperature-Controlled Outdoor Enclosure Optional)
RELATIVE HUMIDITY	0 - 100% (Non-Condensing)
LOCATION	For Installation in an Indoor or Sheltered Location
1. TECHNICAL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. 2. ALL PERFORMANCE SPECIFICATIONS ARE BASED ON ANALYSIS OF WATER STANDARDS UNDER FACTORY CONDITIONS.	

PERFORMANCE SPECIFICATIONS ²	
READING INTERVAL	22 to 5999 minutes with 9 minute updates
RESPONSE TIME	19 minutes with 9 minute updates
ACCURACY	2% of value or 2x detection limit (whichever is greater)
PRECISION	Less than 0.5% of Range
ZERO DRIFT	Less than 0.5% of Range
STANDARD RANGE	Monochloramine 0.02 - 5.00 mg/L Total Ammonia 0.02 - 3.00 mg/L Free Ammonia 0.025 - 2.00 Mg/L Cl ₂ :NH ₃ -N Ratio 0-25
INSTRUMENT SPECIFICATIONS	
SIZE	66 cm tall x 24 cm wide x 18 cm deep (26 in tall x 9.5 in wide x 7 in deep)
WEIGHT	12.25 kg (27 lbs)
FINISH COATING MATERIAL	Fiberglass Reinforced Plastic (FRP)
POWER	120-240 VAC ±10%, 50-60 Hz, 70 VA
POWER CONNECTION	120 VAC US cord / NA plug set (conduit connection optional)
POWER CONDITION	Dedicated Branch Circuit Free From: Surges/Dips > 10%, RF and Switching Noise
SAMPLE CONNECTION	¼ in FNPT Fitting
WASTE CONNECTION	¼ in FNPT Fitting (Open Drain Required)
MOUNTING	Wall (Standard) or Outdoor Enclosure (Optional)
CERTIFICATIONS	CE Compliant / CSA - US Certified
MAINTENANCE	
REAGENT REPLACEMENT	As required (1 month at default read interval)
CLEANING SOLUTIONS REFILL	As required (3 months typical)
PERISTALTIC MIXING PUMP HEAD	Replace after six months of operation
PERISTALTIC MIXING PUMP FULL ASSEMBLY	Replace after twelve months of operation
PERISTALTIC ZEROING/CLEANING PUMP HEAD	Replace after two years of operation

Optional Accessories

Wastewater Sample Extraction



Outdoor Enclosure

