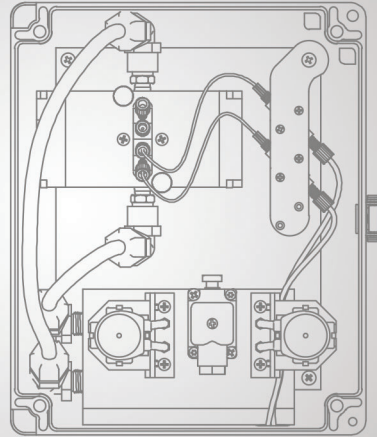


**Simple, Accurate, and Reliable  
Single Parameter Analysis**



## ChemScan mini FreeAm Analyzer

The ChemScan mini FreeAm analyzer provides operators with reliable process chemistry measurements. The analyzer data ensures proper control of free ammonia concentration in chloramination processes. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality.

### APPLICATIONS

- Analysis of Free Ammonia in chloramination processes for potable water, wastewater and industrial water

### FEATURES

- Robust design for demanding operating environments
- Blockage resistant internal sample tubing
- No filtration required on samples with low solids
- Minimal replacement parts for low maintenance
- Sample Blank eliminates electrical/optical drift
- Simple field adjustable calibration
- Separate enclosures for electronic and sample handling
- LED Light source for 10+ years design life
- Self-Cleaning to eliminate internal fouling
- Separate external sample line cleaning available
- Full range of sampling accessories available for all applications

### BENEFITS

- Assure process conformance
- Control energy and chemical costs
- Confirm plant compliance in real-time
- Improve process performance
- Low reagent and maintenance costs

**www.ChemScan.com**

Email: [info@chemscan.com](mailto:info@chemscan.com)  
800-665-7133 (toll-free in U.S.A. and Canada)  
1-262-717-9500 (U.S.A. and international)

### ACCESSORIES



#### Sample Extraction Accessory

Provides a continuous flow of fresh sample to the ChemScan mini analyzer. Designed to reject algae and other larger solids.



#### ChemScan Cartridge Filter Wand

For high-solids applications. No pressurized air, water or chemicals required for cleaning.



#### ChemScan mini Outdoor Enclosure

A turnkey solution for mounting the ChemScan analyzer and related items.



#### Submersible Pump

Provides a continuous flow of fresh sample to sample extraction accessory.



#### Deck-Mounted Self-Priming Pump

Provides a continuous flow of fresh sample to sample extraction accessory. (when submersible pump is not applicable)

*Discuss with your ChemScan representative the most suitable accessories for your application.*

FUNCTIONS AND OUTPUTS		PERFORMANCE SPECIFICATIONS <sup>2</sup>	
ANALYZER OPERATION	Automated, Continuous Analysis of Water and Wastewater	READING INTERVAL	18 to 5999 minutes
MEASUREMENT PRINCIPLE	Reagent-Assisted Optical Absorbance with sample zero correction	DEFAULT READ INTERVAL	22 minutes
NUMBER OF PARAMETERS	One	RESPONSE TIME	18 minutes minimum
PARAMETER OPTION	Free Ammonia	ACCURACY	2% of value or 2x detection limit (whichever is greater) Per EPA SP 846 (The detection limit is the low concentration stated in ranges below)
DATA COMMUNICATIONS	4-20 mA (2 outputs)	PRECISION	Less than 0.5% of Range
DATA LOG	Time Date, Date, Concentration, Diagnostic Info, 5,000 events	ZERO DRIFT	Less than 0.5% of Range
NUMBER OF SAMPLE LINES	One	RANGES	Method 1036 0.01 - 2.0 mg/L
REAGENT ADDITION	YES, Direct Reagent Injection	<b>INSTRUMENT SPECIFICATIONS</b>	
AUTO MAINTENANCE	Auto Clean	SIZE	26" tall x 9.5" wide x 7" deep (66 cm tall x 24 cm wide x 18 cm deep)
CALIBRATION	Factory calibrated for reagent response, field adjustable	WEIGHT	27 lbs (12.25 kg)
<b>SAMPLE PARAMETERS</b>		FINISH COATING MATERIAL	Fiberglass Reinforced Polyester (FRP)
SAMPLE PRESSURE	Pressurized sample line required regulated to 2-10 psi (15-70 kPa), (sample conditioning and pressurizing accessories available)	POWER	120-240 VAC ±10%, 50-60 Hz, 70 VA
SAMPLE FLOW	0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)	POWER CONNECTION	120 VAC US cord / plug set (Standard) (conduit connection optional)
FILTRATION REQUIREMENT	For samples with more than 150 mg/l TSS ( filter required for WW influent and primary effluent)	POWER CONDITION	Dedicated branch circuit free from: surges/dips > 10%, RF and switching noise
STRAINER REQUIREMENT	#20 Mesh - Opening of 0.69 mm (0.027 inches) Provided	OPERATOR INTERFACE	2 x 20 LCD and 4 x 4 Keypad
SAMPLE TEMPERATURE	50-140°F (10° - 60°C)	SAMPLE CONNECTION	¼" FNPT Fitting
SAMPLE TURBIDITY	60NTU or 150mg/l Suspended Solids	WASTE CONNECTION	6 foot length of 5/8" ID clear vinyl tube provided (route to open drain)
<b>OPERATING ENVIRONMENT</b>		MOUNTING	Wall (Standard)
ENCLOSURE RATINGS	Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window Lower Enclosure NEMA 4X Fiberglass Reinforced Polyester	<b>MAINTENANCE</b>	
AMBIENT TEMPERATURE	41 - 113°F (5° - 45°C)	REAGENT REPLACEMENT	As required (1 month typical)
RELATIVE HUMIDITY	0 - 100% (Non-Condensing)	CLEANING SOLUTIONS REFILL	As required (3 months typical)
INSTALLATION	Indoor or Sheltered (from rain and sun) Location	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



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

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