



ChemScan UV-2250/N Analyzer

FOR ON-LINE, REAL-TIME WATER ANALYSIS

The ChemScan UV-2250/N Analyzer provides operators with timely process chemistry measurements. The analyzer provides data to ensure proper control of nitrogen removal processes. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality.

The ChemScan UV-2250/N 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 process conformance
- Control energy and chemical costs
- Confirm plant compliance in real time
- Improve process performance
- Keep reagent and maintenance costs low

Advanced sample handling and conditioning accessories provide reliable operation in challenging process applications while minimizing maintenance. These include both at-process wand systems and centralized pump systems.

AVAILABLE PARAMETERS

- Nitrate
- Ammonia

ANALYZER FEATURES

- Simple to use and maintain
- Designed for the harsh in-plant operation 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
- Recovery to factory default setting
- Upgradeable via USB port



Applications:

- MUNICIPAL WASTEWATER MONITORING IN PROCESS AND EFFLUENT
- INDUSTRIAL WASTEWATER

FUNCTIONS AND OUTPUTS

ANALYZER OPERATION	Automated, Continuous Wastewater Analysis
MEASUREMENT PRINCIPLE	Reagent-Assisted, Multiple-Wavelength UV Absorbance Technology Using Pattern Recognition of Spectral Data
NUMBER OF PARAMETERS	Two per Sample Line
PARAMETER OPTIONS	Nitrate & Ammonia (NH ₃ + NH ₄)
DATA COMMUNICATIONS	4-20 mA (2 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	4 maximum sample lines through Internal Manifold
REAGENT DETECTION	YES (Standard)
AUTO MAINTENANCE	YES (Standard)

SAMPLE PARAMETERS

SAMPLE PRESSURE	Internal pump provides sample flow with max. lift 5 ft. and max. run 20 ft. to sample location or line connection. Pressurized Sample Lines must be 10 psi maximum,
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 0.69 mm (0.027 inches) Provided
SAMPLE TEMPERATURE	50-140°F (10° - 60°C)
SAMPLE TURBIDITY	0-60 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 SPECIFICATIONS²

READING INTERVAL	5-9999 Minutes (parameter and sample-line dependent)
RESPONSE TIME	5-10 Minutes (parameter and sample-line dependent)
ACCURACY	Typ. 2% to 5% of Range, Parameter/Site Specific
PRECISION	Less than 0.5% of Range
ZERO DRIFT	Less than 0.5% of Range
STANDARD RANGE	Nitrate 0.1 - 20.0 mg/l as N Ammonia 0.2 - 20.0 mg/l as N (Higher Ranges Available)

INSTRUMENT SPECIFICATIONS

SIZE	40 x 20 x 10 inches (102 x 51 x 26 cm)
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	7" TFT, LCD, Touch HMI Panel
SAMPLE CONNECTION	¼" FNPT Fitting
WASTE CONNECTION	¼" 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)

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:

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