

## WASTEWATER AMMONIA AND NITRATE

### CAPABILITIES

Continuous, On-Line,  
Automatic Monitoring  
One or Two Sample Lines

Two Parameter Analysis

Analog, Serial or MODBUS  
Output Capabilities

Multiple Alarms (Optional)

Continual Self Diagnostics  
with Alarm

### PARAMETERS

Ammonia and  
Nitrate

### APPLICATIONS

Municipal Wastewater  
- Process (with filtration)  
- Effluent (without filter)

Industrial Wastewater

Sample handling and  
conditioning accessories  
are available for this and  
other ChemScan Analyzers.

- In Situ Cyclic Filters  
- Flow Through Cyclic Filters

### FEATURES

Multiple Wavelength UV  
Absorbance Detection System

Internal Multiple Sample  
Line Manifold

Automatic Zero and Clean

Internal Data Logs

Benign, Inexpensive  
Reagents

No Ion Specific Electrodes  
to Clean or Replace

Simple to Use  
and Maintain

### BENEFITS

A ChemScan On-Line Analyzer  
can automatically provide  
operators with timely process  
chemistry measurements,  
without the need for frequent  
manual sampling or laboratory  
analysis. These measurements  
can be used to:

Assure Process  
Conformance

Control Energy and  
Chemical Costs

Improve Process  
Performance



*For On-Line  
and Real-Time  
Wastewater  
Analysis*

**asa**   
ANALYTICS

*"Monitoring a World of Water"*

ChemScan® UV-2150/N Series  
TECHNICAL SPECIFICATION

## FUNCTIONS AND OUTPUTS

Measurement Principle	High Resolution, Ultraviolet Absorbance
Number of Wavelengths	256
Spectral Range	200 - 450 nm
Calibration Technique	Pattern Recognition of Spectral Data
Number of Parameters	2 max. (Ammonia and Nitrate only)
Parameter Options	Primary or Secondary Absorbance
Data Communications	4 - 20mA (4 outputs max.), RS-232, other formats optional
Data Log	750 Values Time/Date Stamped, 24 Calibration Spectra
Auto Zeroing	YES (Std)
Auto Cleaning	YES (Std)
Analyzer Pump	YES (Std), Zeroing, Cleaning and Internal Sample Flow Only
Sample Conditioning	YES (Opt), Direct Injection
Number of Sample Lines	1 to 2 thru Internal Manifold

## PERFORMANCE SPECIFICATIONS

Reading Interval	3 - 9999 minutes
Response Time	Parameter Dependent (3-5 min. typ.)
Range	Parameter/Site Dependent
Accuracy	Parameter/Site Dependent Typ. 2% to 5% of Range
Precision	Parameter/Site Dependent Typ. 2% of Range
Zero Drift	Parameter Dependent Minimized with Auto Zero

## SAMPLE PARAMETERS

Sample Pressure	Pressurized Sample Lines must be regulated to 10 psi maximum, with max. lift 5 ft. and max. run 20 ft. to sample location or line
connection	
Sample Flow	0.5 to 5 l/min. (1.5 l flush/sampling)
Filtration Requirement	NONE (For samples meeting turbidity and solids requirements), Optional ultrafilter available for high solids or turbidity.
Strainer Requirement	Mesh Opening of 2.0 mm Max.
Sample Temperature	1 <sup>o</sup> - 60 <sup>o</sup> C (Std)
Sample Turbidity	0 - 60 NTU (Max)
Sample Suspended Solids	0 - 150 mg/l (Max)

## MAINTENANCE

Light Source Replacement	Every 5 years
Internal Battery Replacement	Every 2 years
Zero/Clean Solution Refill	As Required (2-4 weeks typ.)
Reagent Refill	As Required (2-4 weeks typ.)

## INSTRUMENT SPECIFICATIONS

Size	40 x 20 x 10 in.
Weight	130 lbs.
Mounting	Wall (Std) or Stand (Opt)
Finish Coating	Baked Enamel on Steel (Std) or Stainless Steel (Opt)
Power	120 VAC ±10%, 50-60 Hz, 10 Amps max.
Power Connection	Hard Wired (Std) or Plug (Opt)
Power Condition	Dedicated Branch Circuit Free From: Surges/Dips > 10%, RF and

Operator Interface  
Sample Cell Material  
Sample Connection  
Waste Connection

Switching Noise  
2 x 20 LCD and 4 x 4 Keypad  
Polymer Body with Quartz Windows  
1/4" FNPT Fitting  
1/4" FNPT Fitting (Open Drain Required)

OPERATING ENVIRONMENT

Enclosure Ratings

NEMA 4 (Main Enclosure)  
NEMA 3R (Optrode Enclosure)

Ambient Temperature

5° - 35°C (Std)

Relative Humidity

0 - 100% (Non-Condensing)

Notes:

1. Technical Specifications are subject to change without prior notice.