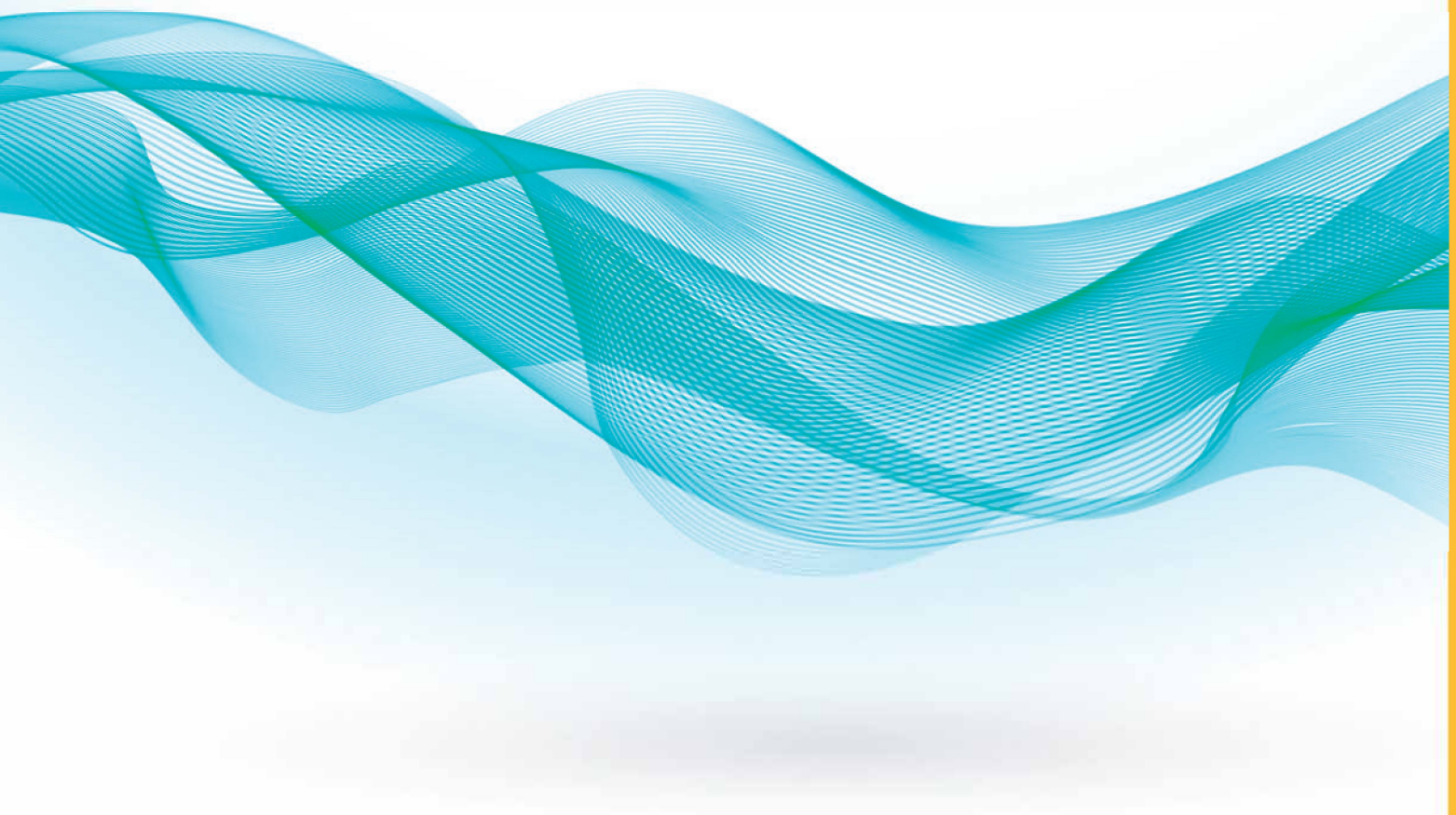
ChemScan®

An In-Situ Brand



ChemScan® UV-Series Analyzers

Features:

- Can be configured for monitoring single or multiple samples and parameters
- Real-time Spectrographic chemical analysis using advanced pattern recognition techniques
- Easily interfaced to SCADA systems (4-20mA, MODBUS or Ethernet)
- Extensive internal data logging
- Self monitored diagnostics and alarms
- Internal manifold with inlets for auto zeroing
  auto cleaning and calibration samples
- New graphic user interface with many new features

Potable Water Monitoring:

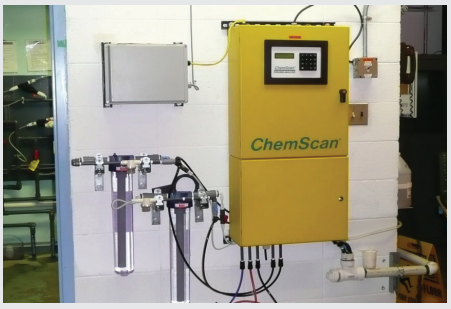
- Chloramination Monitoring
- Water Blending
- Organics Detection
- Nitrification Avoidance

Wastewater Nutrient Monitoring

- Nitrification Analysis
- De-Nitrificaiton Control
- Chem or Bio Phosphorous Removal
- Nutrient Deficiency Analysis
- SBR End Point Detection
- Alkalinity Monitoring

New Model with Graphic Interface

ChemScan on-line analyzers provide operators and control systems with timely process chemistry measurements. These data are used to control and optimize the process resulting in increased plant capability, reduced energy and chemical usage along with monitoring the process for compliance.



Model	Application	Parameters	Max Sample Lines
UV-2150	Nutrients or Inorganics	Analysis of one parameter	4*
UV-3150	Nutrients or Inorganics	Analysis of one parameter	8**
UV-4100	Nutrients or Inorganics	Analysis of multiple parameters (up to 4)	2
UV-6101	Nutrients or Inorganics	Analysis of multiple parameters (up to 8)	8**
UV-2150/S	Water Chloramination	Analysis of up to four parameters free and total ammonia, true monochloramine and total chlorine	2
UV-2150/N	Wastewater Nutrients	Analysis of ammonia and nitrate	8**
UV-2150/NoP	Wastewater Nutrients	Analysis of nitrite and ortho phosphate	2
UV-2150/NHoP	Wastewater Nutrients	Analysis of ammonia and ortho phosphate	8**
UV-2150/DC	Wastewater Chlor/Dechlor	Analysis of up to two parameters such as total chlorine residual and dechlorination agent residual	2

* Only 2 with filters, **Only 4 with filters

Monitor process, reduce energy and chemical costs, meet limits.

ChemScan® mini Analyzers

Accurate, Reliable AND Affordable Single Parameter Analysis

Capabilities:

- Continuous, Real Time Analysis of Constant Flow Sample Stream
- Isolated Analog Output

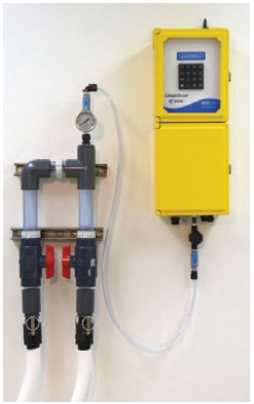
Features:

- Long Life LED Light Source
- Low Maintenance
- Large I.D. Flow Paths
- Simple Field Adjustable Calibration
- Direct Diode Detection
- Sealed Electronics Enclosure
- Auto Cleaning and Zeroing
- No Lamp Replacement or Alignment Required
- No Filtration Required
  - When TSS < 150 mg/L
  - After Secondary Clarifier

The Fond du Lac Wisconsin Regional Wastewater Treatment Facility has saved thousands in chemical costs.

The Fond du Lac facility, with an average flow of 9.8 MGD, treats all of the city's wastewater along with that of neighboring communities. For the last three years, the facility has used a ChemScan mini oP to monitor the chemical feed pump that doses Aluminum Sulfate for Phosphate removal. Jeremy Cramer, Operations Manager for the plant, reports "Alum cost savings of approximately $100,000 per year have been realized." In the last 6 months, the unit has been tied directly to the chemical feed pump via their SCADA system. The system ramps the chemical dosing up and down as needed. "We are on pace to save approximately $50,000 more per year." This results in a total savings estimated at $150,000 per year.

ChemScan® mini Accessories



The Sample Extraction Accessory provides a pressurized sample to the ChemScan mini analyzer where NTU is less than 60 and TSS is less than 150 mg/L

TSS - Total Suspended Solids
NTU - Nephelometric Turbidity Units

ChemScan mini Outdoor Enclosure. A turnkey solution for mounting the ChemScan and related items.

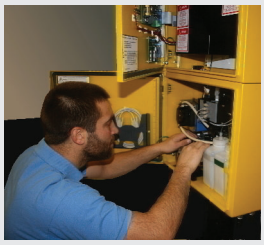
Submersible Pump
1.3" Max. Dia. Solids
Weight: 20 - 30 lbs
Power: 1/4 - 3/4 HP, 120 VAC 60 Hz
Power Cable: 20 feet

ChemScan Cartridge Filter Wand
No cleaning air, water or chemicals required. Filter is disposable; replace monthly in less than 5 minutes.

Deck Mounted Self Priming Pump
1/3 - 1/2 HP
Weight: 40 lbs
Mounting: Base

Support Services

From installation to replacement parts, Chemscan, Inc. provides responsive service by qualified personnel.



- Commissioning
- Supplies
- Training
- Parts
- Service

Contact Information

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Or visit our website:

ChemScan.com

Rev. 5/5/21

Your Local Representative:

Specifications

Updated 6/22/20

General (Common to all minis)

Accuracy:	2% of value or 2x detection limit (whichever is greater)
Environment:	5 - 50 degrees C
Power:	100 - 240 VAC, 50 W
Enclosure:	NEMA 4X
Safety Approval:	CSA-US
Relay Contacts:	1 SPDT Concentration, 1 SPDT Programmable
Serial Interface:	Serial, RS-232, Modbus RTU
Analog Output:	Isolated 4-20 mA
Sample:	0.5 - 1 Liter/analysis, pressure to 10 psi (UV-254 Continuous)

ChemScan mini oP

Range (as PO_4):	0.1 - 9.0 mg/L (Method 1005), 0.3 - 18.0 mg/L (Method 1006)
Range (as PO_4-P):	0.03 - 3.0 mg/L (Method 1003), 0.1 - 6.0 mg/L (Method 1004)
Cycle Interval:	5 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly

ChemScan mini oP XR

Range (as P):	0.1 - 20.0 mg/L (Method 1069)
Range (as PO_4):	0.3 - 60.0 mg/L (Method 1070)
Cycle Interval:	5 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini Ammonia

Range (as N):	0.03 - 25.0 mg/L (Method 1079)
Cycle Interval:	15 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini LowMn

Range:	0.003 - 3.0 mg/L (Method #1072)
Cycle Interval:	5 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini LoP

Range (as PO_4):	0.02 - 3.0 mg/L (Method 1071)
Range (as PO_4-P):	0.003 - 1.00 mg/L (Method 1034)
Cycle Interval:	8 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini LowAm

Range (as N):	0.01 - 10.0 mg/L (Method 1066)
Cycle Interval:	15 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

CHLORAMINATION SUITE

ChemScan mini FreeAm

Range (as N):	0.01 - 2.00 mg/L (Method 1036)
Cycle Interval:	18 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every month, pump kit yearly*

ChemScan mini Mono

Range (as CL2):	0.05 - 10.0 mg/L (Method 1035)
Cycle Interval:	10 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

DRINKING WATER SUITE

ChemScan mini Mn

Range:	0.02 - 8.0 mg/L (Method 1063, 1064)
Cycle Interval:	15 min. (1064) 10 min. (1063) to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini Fe

Range:	0.01 - 5.0 mg/L (Method 1039) 0.02 - 20.0 mg/L (Method 1037)
Cycle Interval:	8 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

WASTEWATER DISINFECTION SUITE

ChemScan mini Sulfite

Range:	0.01 - 4.0 mg/L (Method 1068)
Cycle Interval:	5 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every month, pump kit yearly*

ChemScan mini LowChlor

Range (as CL_2):	0.01 - 2.00 mg/L (Method 1081)
Cycle Interval:	4 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every month, pump kit yearly*

ChemScan mini LowCrVI

Range:	1 -1000 µg/L (Method 1041) 0.03 - 5.0 mg/L (Method 1040)
Cycle Interval:	12 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini Silica

Range:	0.05 - 15.0 mg/L (Method 1058)
Cycle Interval:	7 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 6 months, pump kit yearly*

ChemScan mini UV254

Range (as N):	0.1 - 100%T
Cycle Interval:	Continuous
Sample:	2 - 10 psi continuous flow
Maintenance:	Replace zero/clean sollution

ChemScan mini Cu

Range:	0.02 - 6.0 mg/L (Method 1065) 0.001 - 2.00 mg/L (Method 1056) 0.01 – 6.00 mg/L (Method 1075)
Cycle Interval:	4 min. (1027) 5 min. (1065) 4 min. (1056) to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini Ni

Range:	0.05 - 6.0 mg/L (Method 1057)
Cycle Interval:	8 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 3 months, pump kit yearly*

ChemScan mini Peracetic Acid (PAA)

Range:	0.015 - 5.0 mg/L (Method 1073)
Cycle Interval:	5 minutes to 9999 minutes (field programmable)
Maintenance:	Reagent replacement every 4 weeks, pump kit yearly*

CHLORAMINATION ANALYZER

ChemScan mini ChlorAm

Range:	Free Ammonia 0.025 – 2.00 mg/L Total Ammonia 0.02 – 3.00 mg/L Monochloramine 0.02 – 5.00 mg/L Ratio – Calculated using Total Ammonia and Monochloramine
Cycle Interval:	18 minutes to 9999 minutes with 9 minute updates
Maintenance:	Reagent replacement every month, pump kit yearly*

* Based on default cycle time

www.ChemScan.com

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