

Simple, Accurate, and Reliable Single-Parameter Analysis



# ChemScan mini CrVI Analyzer

The ChemScan CrVI analyzer provides operators with reliable process chemistry measurements. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality.

#### **APPLICATIONS**

 Analysis of Hexavalent Chromium in potable water, wastewater and industrial processes

#### **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

#### **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.



## Mini CrVI Technical Specifications<sup>1</sup>

FUNCTIONS AND OUTPUTS	
ANALYZER OPERATION	Automated, Continuous Analysis of Water and Wastewater
MEASUREMENT PRINCIPLE	Reagent-Assisted Optical Absorbance with sample zero correction
NUMBER OF PARAMETERS	One
PARAMETER OPTION	Hexavalent Chromium
DATA COMMUNICATIONS	4-20 mA (2 outputs)
DATA LOG	Time Date, Date, Concentration, Diagnostic Info, 5,000 events
NUMBER OF SAMPLE LINES	One
REAGENT ADDITION	YES, Direct Reagent Injection
AUTO MAINTENANCE	Auto Clean
CALIBRATION	Factory calibrated for reagent response, field adjustable
SAMPLE PARAMETERS	
SAMPLE PRESSURE	B
SAIVIF LE PRESSURE	Pressurized sample line required regulated to 2-10 psi (15-70 kPa), (sample conditioning and pressurizing accessories available)
SAMPLE FLOW	
	conditioning and pressurizing accessories available)
SAMPLE FLOW	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and
SAMPLE FLOW FILTRATION REQUIREMENT	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT	conditioning and pressurizing accessories available)  0.5 to 1.0 I/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT SAMPLE TEMPERATURE	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided  50-140°F (10° - 60°C)  60NTU or 150mg/l Suspended Solids
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT SAMPLE TEMPERATURE SAMPLE TURBIDITY	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided  50-140°F (10° - 60°C)  60NTU or 150mg/l Suspended Solids
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT SAMPLE TEMPERATURE SAMPLE TURBIDITY  OPERATING ENVIRONS	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided  50-140°F (10° - 60°C)  60NTU or 150mg/l Suspended Solids  WENT  Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT SAMPLE TEMPERATURE SAMPLE TURBIDITY OPERATING ENVIRONMENT ENCLOSURE RATINGS	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided  50-140°F (10° - 60°C)  60NTU or 150mg/l Suspended Solids  MENT  Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window Lower Enclosure NEMA 4X Fiberglass Reinforced Polyester
SAMPLE FLOW FILTRATION REQUIREMENT STRAINER REQUIREMENT SAMPLE TEMPERATURE SAMPLE TURBIDITY OPERATING ENVIRONMENT ENCLOSURE RATINGS AMBIENT TEMPERATURE	conditioning and pressurizing accessories available)  0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)  For samples with more than 150 mgl TSS ( filter required for WW influent and primary effluent)  #20 Mesh - Opening of 0.7 mm (0.027 inches) Provided  50-140°F (10° - 60°C)  60NTU or 150mg/l Suspended Solids  WENT  Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window Lower Enclosure NEMA 4X Fiberglass Reinforced Polyester  41 - 113°F (5° - 45°C)

PERFORMANCE SPECIFICATIONS <sup>2</sup>	
READING INTERVAL	12 to 5999 minutes
DEFAULT READ INTERVAL	17 minutes
RESPONSETIME	12 minutes minimum
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)
PRECISION	Less than 0.5% of Range
ZERO DRIFT	Less than 0.5% of Range
RANGES	Method 1041 (1-1000 μg/L), DPCZ Method Method 1040 (0.03-5.0 mg/L)
INSTRUMENT SPECIFICATIONS	
SIZE	26" tall x 9.5" wide x 7" deep (66 cm tall x 24 cm wide x 18 cm deep)
WEIGHT	27 lbs (12.25 kg)
FINISH COATING MATERIAL	Fiberglass Reinforced Polyester (FRP)
POWER	120-240 VAC ±10%, 50-60 Hz, 70 VA
POWER CONNECTION	120 VAC US cord / plug set (Standard) (conduit connection optional)
POWER CONDITION	Dedicated branch circuit free from: surges/dips > 10%, RF and switching noise
OPERATOR INTERFACE	2 x 20 LCD and 4 x 4 Keypad
SAMPLE CONNECTION	1/4" FNPT Fitting
WASTE CONNECTION	6 foot length of 5/8" ID clear vinyl tube provided (route to open drain)
MOUNTING	Wall (Standard)
MAINTENANCE	
REAGENT REPLACEMENT	As required (3 months 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





#### 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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