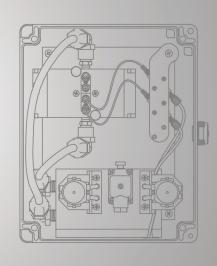


Simple, Accurate, and Reliable Single-Parameter Analysis





# **ChemScan mini oP Analyzer**

The ChemScan mini oP Analyzer provides operators with reliable process chemistry measurements. The analyzer data ensures proper control of phosphate treatment and addition processes. This reduces the need for frequent manual sampling or laboratory analysis while producing the best water quality.

### **APPLICATIONS**

• Analysis of ortho phosphate 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 electronics and sample handling
- LED light source for 10+ years of 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
- Reduce 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 oP Technical Specifications<sup>1</sup>

FUNCTIONS AND OUTPUTS		PERFORMANCE SPECIFICATIONS <sup>2</sup>		
ANALYZER OPERATION	Automated, Continuous Analysis of Water and Wastewater	READING INTERVAL	4 to 5999 minutes	
MEASUREMENT PRINCIPLE	Reagent-Assisted Optical Absorbance with sample zero correction	DEFAULT READ INTERVAL	5 minutes	
NUMBER OF PARAMETERS	One	RESPONSE TIME	4 minutes minimum	
PARAMETER OPTION	Ortho Phosphate – as either PO4 or PO4-P	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 1003 Orthophosphate (OPO4-P) Low Range 0.03 - 3.0 mg/L Method 1004 Orthophosphate (OPO4-P) High Range 0.1 - 6.0 mg/L Method 1005 Orthophosphate (PO4) Low Range 0.1 - 9.0 mg/L Method 1006 Orthophosphate (PO4) High Range 0.3 - 18.0 mg/L	
REAGENT ADDITION	YES, Direct Reagent Injection			
AUTO MAINTENANCE	Auto Clean	INSTRUMENT SPE	INSTRUMENT SPECIFICATIONS	
CALIBRATION	Factory calibrated for reagent response, field adjustable	SIZE	66 cm tall x 24 cm wide x 18 cm deep (26 in tall x 9.5 in wide x 7 in deep)	
SAMPLE PARAMETERS		WEIGHT	12.25 kg (27 lbs)	
SAMPLE PRESSURE	Pressurized sample line required regulated to 2-10 psi (15-70 kPa), (sample conditioning and pressurizing accessories available)	FINISH COATING	Fiberglass Reinforced Polyester (FRP)	
SAMPLE FLOW	0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)	MATERIAL	400 040 140 140 150 160 150 150 150 150 150 150 150 150 150 15	
FILTRATION REQUIREMENT	For samples with more than 150 mgl TSS (filter required for WW influent and primary effluent)	POWER CONNECTION	120-240 VAC ±10%, 50-60 Hz, 70 VA  120 VAC US cord / plug set (Standard) (conduit connection optional)	
STRAINER REQUIREMENT	#20 Mesh - Opening of 0.7 mm (0.027 inches) Provided	POWER CONDITION	Dedicated branch circuit free from: surges/dips > 10%, RF and switching noise	
SAMPLE TEMPERATURE	10 - 60°C (50 -140°F)			
SAMPLE TURBIDITY	60NTU or 150mg/l Suspended Solids	OPERATOR INTERFACE	2 x 20 LCD and 4 x 4 Keypad	
OPERATING ENVIRON	, i	SAMPLE CONNECTION	1/4 in FNPT Fitting	
ENCLOSURE RATINGS	Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window Lower Enclosure NEMA 4X Fiberglass Reinforced Polyester	WASTE CONNECTION	1.83M length of 15 mm (6 ft length of 5/8 in) ID clear vinyl tube provided (route to open drain)	
AMBIENTTEMPERATURE	5 - 45°C (41 – 113°F)	MOUNTING	Wall (Standard)	
RELATIVE HUMIDITY	0 - 100% (Non-Condensing)	MAINTENANCE		
INSTALLATION	Indoor or Sheltered (from rain and sun) Location	REAGENT REPLACEMENT	As required (3 months at default read interval for low range methods, 1.5 months for high range)	
		CLEANING SOLUTIONS REFILL	As required (3 months typical)	
		PERISTALTIC MIXING PUMP HEAD	Replace after six months of operation	

PERISTALTIC MIXING

CLEANING PUMP

PUMP FULL ASSEMBLY
PERISTALTIC ZEROING/

Replace after twelve months of operation

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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