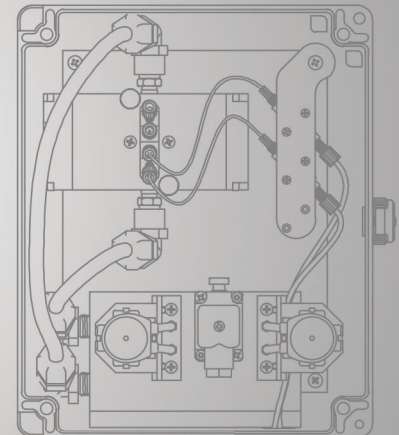


**Simple, Accurate,  
and Reliable  
Single Parameter  
Analysis**



## ChemScan mini LoP Analyzer

The ChemScan mini LoP 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 Low Range 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 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)

| FUNCTIONS AND OUTPUTS        |   | PERFORMANCE SPECIFICATIONS <sup>2</sup> |   |
|------------------------------|---|---|---|
| ANALYZER OPERATION           | Automated, Continuous Analysis of Water and Wastewater  | READING INTERVAL                        | 7- 5999 minutes   |
| MEASUREMENT PRINCIPLE        | Reagent-Assisted Optical Absorbance with sample zero correction   | DEFAULT READ INTERVAL                   | 13 minutes  |
| NUMBER OF PARAMETERS         | One   | RESPONSE TIME                           | 7 minutes minimum   |
| PARAMETER OPTION             | Low Range Ortho Phosphate – as either PO <sub>4</sub> or 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 1034 Phosphate 0.003-1.00 mg PO <sub>4</sub> -P/L<br>Method 1071 Phosphate 0.02-3.0 mg PO <sub>4</sub> /L                              |
| REAGENT ADDITION             | YES, Direct Reagent Injection   | <b>INSTRUMENT SPECIFICATIONS</b>        |   |
| AUTO MAINTENANCE             | Auto Clean  | SIZE                                    | 26" tall x 9.5" wide x 7" deep (66 cm tall x 24 cm wide x 18 cm deep)   |
| CALIBRATION                  | Factory calibrated for reagent response, field adjustable   | WEIGHT                                  | 27 lbs (12.25 kg)   |
| <b>SAMPLE PARAMETERS</b>     |   | FINISH COATING MATERIAL                 | Fiberglass Reinforced Polyester (FRP)   |
| SAMPLE PRESSURE              | Pressurized sample line required regulated to 2-10 psi (15-70 kPa), (sample conditioning and pressurizing accessories available)    | POWER                                   | 120-240 VAC ±10%, 50-60 Hz, 70 VA   |
| SAMPLE FLOW                  | 0.5 to 1.0 l/min. 1 L Flush Per Sample (0.13 to 0.26 GPM - 0.26 Gallon Flush)   | POWER CONNECTION                        | 120 VAC US cord / plug set (Standard) (conduit connection optional)   |
| FILTRATION REQUIREMENT       | For samples with more than 150 mg/l TSS ( filter required for WW influent and primary effluent)                                     | POWER CONDITION                         | Dedicated branch circuit free from: surges/dips > 10%, RF and switching noise   |
| STRAINER REQUIREMENT         | #20 Mesh - Opening of 0.69 mm (0.027 inches) Provided   | OPERATOR INTERFACE                      | 2 x 20 LCD and 4 x 4 Keypad   |
| SAMPLE TEMPERATURE           | 50-140°F (10° - 60°C)   | SAMPLE CONNECTION                       | ¼" FNPT Fitting   |
| SAMPLE TURBIDITY             | 60NTU or 150mg/l Suspended Solids   | WASTE CONNECTION                        | 6 foot length of 5/8" ID clear vinyl tube provided (route to open drain)  |
| <b>OPERATING ENVIRONMENT</b> |   | MOUNTING                                | Wall (Standard)   |
| ENCLOSURE RATINGS            | Upper Enclosure: NEMA 4X Fiberglass Reinforced Polyester, Acrylic window<br>Lower Enclosure NEMA 4X Fiberglass Reinforced Polyester | <b>MAINTENANCE</b>                      |   |
| AMBIENT TEMPERATURE          | 41 - 113°F (5° - 45°C)  | REAGENT REPLACEMENT                     | As required (3 months at default read interval)   |
| RELATIVE HUMIDITY            | 0 - 100% (Non-Condensing)   | CLEANING SOLUTIONS REFILL               | As required (3 months typical)  |
| INSTALLATION                 | Indoor or Sheltered (from rain and sun) Location  | 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