

ChemScan® UV-2150/N Series Technical Specification

FUNCTIONS AND OUTPUTS

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|------------------------|--|
| Measurement Principle | High Resolution, Ultraviolet Absorbance |
| Detector | 256 Element Array |
| Spectral Range | 200 - 450 nm |
| Calibration Technique | Pattern Recognition of Spectral Data |
| Number of Parameters | Nitrate and Ammonia Only |
| Parameter Options | Primary or Secondary Absorbance |
| Data Communications | 4-20mA (4 outputs per sample line max.), RS-232, others optional |
| Data Log | 750 Values Time / Date Stamped, 24 Calibration Spectra |
| Auto Zeroing | YES (Standard) |
| Auto Cleaning | YES (Standard) |
| Analyzer Pump | YES (Standard) Zeroing, Cleaning and Internal Sample Flow Only |
| Reagent Addition | YES (Standard), Direct Reagent Injection |
| Number of Sample Lines | 1 or 2 through Internal Manifold |

PERFORMANCE SPECIFICATIONS²

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|------------------|-------------------------------------|
| Reading Interval | 3 to 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

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| Sample Pressure | Pressurized Sample Lines Std. Regulated to 34-69 Kpa (5-10 psi), (10 psi Fixed Pressure Regulators Provided) (Unpressurized Optional) |
| Sample Flow | 0.5 to 5.0 l/min. 1.5 L flush per sample (0.13 to 1.32 gpm – 0.4 gallon flush) |
| Filtration Requirement | NONE (For samples meeting turbidity and solids requirements) |
| Strainer Requirement | #20 Mesh - Opening of 0.69 mm (0.027 inches) provided |
| Sample Temperature | 1 ^o - 60 ^o C (34 – 140 ^o F) |
| Sample Turbidity | 0 - 60 NTU (Standard) |
| Sample Suspended Solids | 0 - 150 mg/l TSS |

MAINTENANCE

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|----------------------------------|-------------------------------|
| Light Source Replacement | Every 4 years |
| Internal Battery Replacement | Every 2 years |
| Zero & Cleaning Solutions Refill | As Required (4 weeks typical) |
| Reagents Refill | As Required (4 weeks typical) |

INSTRUMENT SPECIFICATIONS

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|---------------------------|---|
| Size | 102 x 51 x 26 cm (40 x 20 x 10 inches) |
| Weight | 59 kg (130 lbs) |
| Mounting | Wall (Standard) or Stand (Optional) |
| Finish Coating / Material | Polyurethane Enamel over Polyester Urethane on Steel (Standard) or Type 316 Stainless Steel (Optional) |
| Power | 120 VAC ±10%, 50-60 Hz, 4 Amps maximum |
| Power Connection | Hard Wired (Standard) or Plug (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 Cell Material | Polymer Body with Quartz Windows |
| Sample Connection | ¼" FNPT Fitting |
| Waste Connection | ¼" FNPT Fitting (Open Drain Required) |

OPERATING ENVIRONMENT

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| Enclosure Ratings | Upper Enclosure: NEMA 4 (NEMA 4X Optional, 316 SS) Lower Enclosure NEMA 3R(Optional, 316 SS) (shielded spill drain) |
| Ambient Temperature | 5 ^o - 35 ^o C (41 – 95 ^o F) |
| Relative Humidity | 0 - 100% (Non-Condensing) For installation in an indoor or sheltered location |

Notes:

1. Technical Specifications are subject to change without prior notice.
2. All performance specifications are based on analysis of water standards under factory conditions.