

ChemScan® UV-3150
TECHNICAL SPECIFICATION

FUNCTIONS AND OUTPUTS

| | |
|------------------------|-----------------------------------------------------------|
| Measurement Principle | High Resolution, Ultraviolet Absorbance |
| Number of Wavelengths | 256 |
| Spectral Range | 200 - 450 nm |
| Calibration Technique | Pattern Recognition of Spectral Data |
| Number of Parameters | 1 (Std), 2 max. (Opt) |
| Parameter Options | Primary Absorbance Only (See Table 1) |
| Data Communications | 4 - 20mA (8 outputs max.), RS-232, other formats optional |
| Data Log | 1000 Values Time/Date Stamped, 24 Calibration Spectra |
| Auto Zeroing | YES (Std) |
| Auto Cleaning | YES (Std) |
| Analyzer Pump | YES (Std), Zeroing and Cleaning Only |
| Sample Conditioning | NONE |
| Number of Sample Lines | 1 to 8 thru Internal Manifold |

PERFORMANCE SPECIFICATIONS

| | |
|------------------|----------------------------------------------------|
| Reading Interval | 1 - 9999 minutes |
| Response Time | Immediate after sample flush |
| Range | Parameter/Site Dependent (See Table 1) |
| 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

| | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Sample Pressure | 10 to 80 psi (Std), 0-10 psi (Opt) w/peristaltic pump (max. lift 5 ft., max. run 20 ft.) |
| Sample Flow | 0.5 to 5 l/min. (1.5 l flush/sampling) |
| Filtration Requirement | NONE (For Samples Meeting Turbidity and Solids Requirements) Optional ultrafilter available for high solids or turbidity. |
| Strainer Requirement | Mesh Opening of 2.0 mm Max. |
| Sample Temperature | 1° - 60°C (Std) |
| Sample Turbidity | 0 - 60 NTU (Std) |
| Sample Suspended Solids | 0 - 150 mg/l TSS |

MAINTENANCE

| | |
|------------------------------|------------------------------|
| Light Source Replacement | Every 5 years |
| Internal Battery Replacement | Every 2 years |
| Zero/Clean Solution Refill | As Required (2-4 weeks typ.) |

INSTRUMENT SPECIFICATIONS

| | |
|----------------------|---------------------------------------------------------------------------------|
| Size | 40 x 20 x 10 in. |
| Weight | 130 lbs. |
| Mounting | Wall (Std) or Stand (Opt) |
| Finish Coating | Baked Enamel on Steel (Std) or Stainless Steel (Opt) |
| Power | 120/240 VAC ±10%, 50-60 Hz, 10 Amps max. |
| Power Connection | Hard Wired (Std) or Plug (Opt) |
| 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 (Std) or 316 SS (Opt) |

Sample Connection ¼" FNPT Fitting
Waste Connection ¼" FNPT Fitting (Open Drain Required)

OPERATING ENVIRONMENT

Enclosure Ratings NEMA 4 (Main Enclosure)
 NEMA 3R (Optrode Enclosure)
Ambient Temperature 5^o - 35^oC (Std)
Relative Humidity 0 - 100% (Non-Condensing)

| Table 1 UV-3150 Primary Absorbance Parameters (Standard) | |
|-------------------------------------------------------------|-------------------------------------------|
| Nitrate, Low Range | 0.1 to 10.0 mg/l as NO ₃ |
| Nitrate, High Range | 10.0 to 100.0 mg/l as NO ₃ |
| Nitrite, Low Range | 0.1 to 10.0 mg/l as NO ₂ |
| NO _x , Low Range | 0.1 to 10.0 mg/l as N |
| NO _x , High Range | 10.0 to 100.0 mg/l as N |
| Monochloramine | 0.1 to 10.0 as Cl ₂ |
| Iron III | 0.5 to 20.0 mg/l |
| Molybdenum | 0.5 to 20.0 mg/l |
| Chromium VI | 0.5 to 20.0 mg/l |
| Organics (NOM) | 0.2 to 20.0 mg/l as TOC or COD equivalent |
| % Transmittance | 5.0 to 100.0% |
| UV-254 Absorbance | 0.01 to 2.0 Absorbance Units |

Notes:

1. Technical Specifications are subject to change without prior notice.
2. Parameter range is site dependent and is based on a standard 13mm path length and a potable water matrix.