

**products** ///

- Algae Control
- Ammonia
- Calibration
- Chlorine
- Conductivity
- Cooling Tower Monitoring
- Dissolved Oxygen
- Interface Level
- Nitrate/Nitrite
- Odour FOG Control
- pH/ORP
- Self Cleaning Filters
- Sludge Blanket Level
- SRT Control
- Suspended Solids
- TOC/COD
- Turbidity

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**/// ChemScan UV-3150 Process Analyser**

**Capabilities**

- Continuous, On-Line, Automatic Monitoring of up to Eight Sample Lines
- Single or Dual Parameters
- Multiple Detection Ranges
- Multiple Data Output Capabilities
- Up to Eight Concentration Set Point Alarms
- Continual Self Diagnostics with Alarm

**Features**

- Multiple Wavelength UV Absorbance Detection System
- Integrated Multiple Sample Line Manifold
- Automatic Zero and Clean
- Internal Data Logs
- No Reagents Required
- No Specific Ion Electrodes to Clean or Replace
- Simple to Use Operator Interface
- Sample handling and conditioning accessories are available for this and other ChemScan® Analyzers.

**Parameters**

- Nitrate - Nitrite - Organics - Metals - Color - UV 254 - % Transmittance - Monochloramine
- See other Models for additional Parameters

**Applications**

- Municipal Potable Water
  - Surface Water Treatment
  - Well Blending
  - Ion Exchange Breakthrough
- Municipal Wastewater
  - Process (with filtration)
  - Effluent (without filter)
- Cooling/Boiler Water
- Industrial Wastewater
- Industrial Process Water
  - Plating Bath Adjustment
  - Leak Detection

**Benefits**

A ChemScan® On-Line Analyzer can automatically provide operators with timely process chemistry measurements, without the need for frequent manual sampling or laboratory analysis. These measurements can be used to:

*Assure Process Conformance*

*Control Energy and Chemical Costs*

*Improve Process Performance*



*For On-line And Real-time  
Water And Wastewater  
Analysis Applications*

## /// Technical Specifications

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### Functions And Outputs

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

### Performance Specifications

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<b>Reading Interval:</b>	1 - 9999 minutes
<b>Response Time:</b>	Immediate after sample flush
<b>Range:</b>	Parameter/Site Dependent (See Table 1)
<b>Accuracy:</b>	Parameter/Site Dependent, Typically 2% to 5% of Range
<b>Precision:</b>	Parameter/Site Dependent, Typically 2% of Range
<b>Zero Drift:</b>	Parameter Dependent, Minimized with Auto Zero

### Sample Parameters

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<b>Sample Pressure:</b>	10 to 80 psi (Std), 0-10 psi (Opt) w/peristaltic pump (max. lift 5 ft., max. run 20 ft.)
<b>Sample Flow:</b>	0.5 to 5 l/min.. (1.5 l flush/sampling)
<b>Filtration Requirement:</b>	NONE (For Samples Meeting Turbidity and Solids Requirements)
<b>Strainer Requirement</b>	Mesh Opening of 2.0 mm Max. Optional ultrafilter available for high solids or turbidity.
<b>Sample Temperature:</b>	10 - 600 °C (Std)
<b>Sample Turbidity:</b>	0 - 60 NTU (Std)
<b>Sample Suspended Solids:</b>	0 - 150 mg/l (Max.)

### Maintenance

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<b>Light Source Replacement:</b>	Every 5 years
<b>Internal Battery Replacement:</b>	Every 2 years
<b>Zero/Clean Solution Refill:</b>	As Required (2-4 weeks typ.)
<b>Reagent Refill:</b>	As Required (2-4 weeks typ.)



## Instrument Specifications

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<b>Size:</b>	40 x 20 x 10 in.
<b>Weight:</b>	130 lbs. / 59 kg
<b>Mounting:</b>	Wall (Std) or Stand (Opt)
<b>Finish Coating:</b>	Baked Enamel on Steel (Std) or Stainless Steel (Opt)
<b>Power:</b>	120/240 VAC $\pm$ 10%, 50-60 Hz, 10 Amps max
<b>Power Connection:</b>	Hard Wired (Std) or Plug (Opt)
<b>Power Condition:</b>	Dedicated Branch Circuit Free From: surges/dips > 10%, RF and Switching Noise
<b>Operator Interface:</b>	2 X 20 LCD and 4 X 4 Keypad
<b>Sample Cell Material:</b>	Polymer (Std) or 316 SS (Opt)
<b>Sample Connection:</b>	1/4" FNPT Fitting
<b>Waste Connection:</b>	1/4" FNPT Fitting (Open Drain Required)

## Operating Environment

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<b>Enclosure Ratings:</b>	NEMA 4 (Main Enclosure), NEMA 3R (Optrode Enclosure)
<b>Ambient Temperature:</b>	5° - 35°C (Std)
<b>Relative Humidity:</b>	0 - 100% (Non-Condensing)

## Table 1 - UV-3150 Primary Absorbance Parameters (Standard)

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<b>Nitrate, Low Range:</b>	0.1 to 10.0 mg/l as NO <sub>3</sub>
<b>Nitrate, High Range</b>	10.0 to 100.0 mg/l as NO <sub>3</sub>
<b>Nitrite, Low Range</b>	0.1 to 10.0 mg/l as NO <sub>2</sub>
<b>NOx, Low Range</b>	0.1 to 10.0 mg/l as N
<b>NOx, High Range</b>	10.0 to 100.0 mg/l as N
<b>Monochloramine</b>	0.1 to 10.0 as Cl <sub>2</sub>
<b>Iron III</b>	0.5 to 20.0 mg/l
<b>Molybdenum</b>	0.5 to 20.0 mg/l
<b>Chromium VI</b>	0.5 to 20.0 mg/l
<b>Organics (NOM)</b>	0.2 to 20.0 mg/l as TOC or COD equivalent
<b>% Transmittance</b>	5.0 to 100.0%
<b>UV-254 Absorbance</b>	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.