

ChemScan® UV-2150/DC Series
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	Two (special for de-chlorination monitoring)
Parameter Options	Residual Chlorine, Residual De-Chlorination Chemical
Data Communications	4 - 20mA (3 outputs), MODBUS, 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, Cleaning and Internal Sample Flow Only
Sample Conditioning	YES (Opt), Direct Injection
Number of Sample Lines	2 through Internal Manifold

PERFORMANCE SPECIFICATIONS²

Reading Interval	5 to 9999 minutes
Response Time	10 minutes for the entire suite
Range	Residual Chlorine 0.05 - 5.00 mg/l as Cl ₂ (Influent) Residual Chlorine 0.005 - 0.500 mg/l as Cl ₂ (Effluent) De-chlorination agent 0.005 - 0.500 mg/l as Cl ₂ or as De-chlorination

Agent

Accuracy	2% to 5% of Range
Precision	Less than 0.5% of Range
Zero Drift	Less than 0.5% of Range (with Auto Zero)

SAMPLE PARAMETERS

Sample Pressure	Pressurized Sample Lines must be regulated to 10-60 psi
Sample Flow	0.5 to 5.0 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 ^o - 60 ^o 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 (4 weeks typical) DI Water, dilute acid
Reagent Refill	As Required (4 weeks typical) Potassium Iodide, Potassium Iodate,

Sulfuric Acid

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 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 Body with Quartz Windows
Sample Connection	¼" FNPT Fitting
Waste Connection	¼" FNPT Fitting (Open Drain Required)

OPERATING ENVIRONMENT

Enclosure Ratings	NEMA 4 (Electronics Enclosure) NEMA 3R (Flow Cell Enclosure)
Ambient Temperature	5° - 35°C (Std)
Relative Humidity	0 - 100% (Non-Condensing)

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.