

C³150™ PS

Packaged Ultraviolet Disinfection System

Description

The Calgon Carbon C³150 PS packaged UV disinfection system product line is an advanced, cost-effective solution for the disinfection of wastewater. This state-of-the-art UV disinfection system is intended for plants with flows of 50,000 gallons per day to 1 MGD (200 to 3,800 m³ per day).

The C³150 PS UV disinfection system is prepackaged for quick and easy installation. The design uses a rugged modular concept that simplifies operation and routine maintenance by operations personnel. The complete prepackaged UV system includes lamp racks, stainless steel channel, power distribution center and all necessary interconnecting cables.

It is designed for simple installation and trouble-free operation throughout the life of the system. The C³150 PS is designed to operate at temperatures ranging from 14°–104°F (-10°–40°C) with 5–95% relative humidity (non-condensing). System options are available for conditions outside of this range.

Design Features

Completely Prepackaged

- Includes all components required for operating a UV disinfection system
- Includes a prefabricated stainless steel channel with a level control weir and preassembled quick-connect cables for simple installation and system start-up

Lamp Technology

- Low-pressure, high-output (LPHO) lamp technology
- Pre-heat start and continuous heat configuration

Ballast Technology

- Efficient, high frequency electronic ballast
- Variable output
- Each ballast powers two LPHO lamps

Automatic Cleaning System

- Mechanical, non-chemical cleaning
- Automatic or manual initiation

Innovative Control System

- Dose or flow pacing
- Self-diagnostics
- Lamp status indication
- Elapsed time counter
- Remote annunciation of alarms and bank status

UV Intensity Sensor

- Monitors the average intensity within the lamp bank array
- User adjustable setpoints for low and low-low UV Intensity alarms

Input Power Options

- 208/120VAC, 3 Phase, 4 Wire and GND, 60 Hz
- 380/220VAC, 3 Phase, 4 Wire and GND, 50/60 Hz
- 415/240VAC, 3 Phase, 4 Wire and GND, 50/60 Hz

Power Demand

- 170 watts / lamp including ballast (nominal)

Power Quality

- System Power Factor is 0.95 minimum

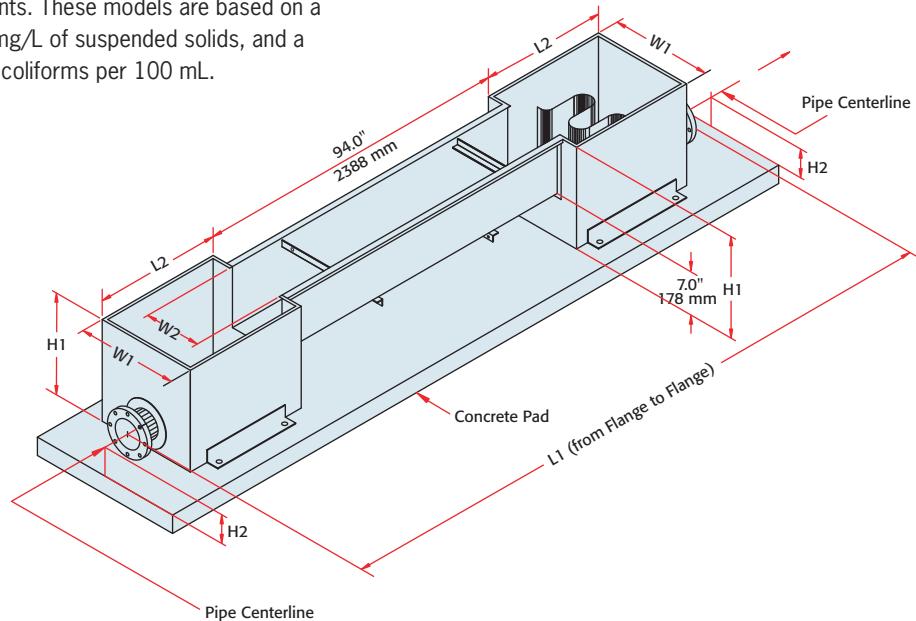
Options

- Magnetic Flow Meter
- Portable Photometer
- Service Trolley



Flows, Power Demands and Dimensions

The table below outlines some typical C³150 PS wastewater disinfection systems for a range of flow rates. Systems will vary to suit site-specific requirements. These models are based on a UV transmission of 65%, 15 mg/L of suspended solids, and a disinfection limit of 200 fecal coliforms per 100 mL.



C³150™ PS Packaged System Details

Model Number	Peak Flow m ³ /day	Peak Flow gal/day x 1000	No. of Lamps	Power Demand (Watts)	L1	Dimensions (mm/inches)					H2	Flange Size ¹⁾ Inlet (inches)	Flange Size ¹⁾ Outlet (inches)	Weight (kg/lbs) approx
C3-10125P	475	125	2	350	3861 152.0	610 24.0	406 16.0	178 7.0	521 20.5	95 3.75	3	3	142 312	
C3-10250P	950	250	4	700	4064 160.0	711 28.0	762 30.0	178 7.0	610 24.0	140 5.5	6	6	208 458	
C3-10375P	1,425	375	6	1,050	4064 160.0	711 28.0	762 30.0	178 7.0	699 27.5	140 5.5	6	6	236 519	
C3-10500P	1,900	500	8	1,400	4064 160.0	711 28.0	762 30.0	178 7.0	787 31.0	140 5.5	6	6	265 584	
C3-10750P	2,850	750	12	2,100	4470 176.0	914 36.0	1016 40.0	356 14.0	699 27.5	171 6.75	8	8	352 775	
C3-11000P	3,800	1,000	16	2,800	4470 176.0	914 36.0	1016 40.0	356 14.0	787 31.0	171 6.75	8	8	413 909	

¹⁾Flange size: AWWA C207 Class B Ring Flange (304 SS)

Please contact factory for dimensions applicable to concrete channel.



Calgon Carbon
UV Technologies Division
2000 McLaren Woods Drive
Coroopolis, PA 15108 USA
800.422.7266
724.218.7001
724.695.3342 Fax

www.calgoncarbon.com/uv

Calgon Carbon Canada
7100 Woodbine Ave., Suite 310
Markham, ON L3R 5J2
Canada
905.889.5853
905.477.7355 Fax

Corporate Headquarters
Calgon Carbon Corporation
500 Calgon Carbon Drive
Pittsburgh, PA USA 15205
800.422.7266
412.787.6700
412.787.6713 Fax



Your local representative