

Spectron High Capacity DI System

Light Commercial Deionization System

Overview

The Spectron High Capacity DI System by US Water Systems is engineered for high performance deionization in light commercial applications. Built with stainless steel reinforced housings and oversized 4.5" x 20" cartridges, Spectron delivers extended service life, minimal bypass risk, and American-made reliability.

Key Features



Made in the USA

Designed and assembled in the United States to ensure quality, consistency, and support.

Oversized Cartridge Capacity for Longer Service Life

Features large-format 4.5" x 20" cartridges nearly double the Resin volume of typical 2.5" cartridges for significantly greater treatment capacity and fewer cartridge changeouts.



Double O-Ring Cartridge Seal

Positive-sealing dual o-rings eliminate the risk of untreated water bypass common in single-gasket systems.



Stainless Steel Reinforced Housing Threads Strengthened to prevent cracking, galling, or seizing under repeated service in commercial environments.



Typical Applications

- Spot-Free Vehicle Rinse
- Laboratory & Glassware Rinse
- Electronics or Semiconductor Manufacturing
- Pharmaceutical or Medical Equipment Final Rinse
- Humidification & Misting Systems







System Specifications

Parameter	Value	
Cartridge Size	(2) 4.5" x 20" Mixed Bed Cartridges	
	(1) 4.5" x 10" 10 Micron Carbon Block	
Max Operating Pressure	90 PSI	
Max Operating Temp	100°F (38°C)	
Inlet/Outlet Ports	Inlet = 1" FNPT / Outlet = 3/8" Hose Barb	
Housing Material	Reinforced Polypropylene	
Cartridge Seal	Dual O-Ring, Positive Seal	
Cartridge Type	Mixed-Bed Deionization Resin	
Mounting Options	Wall Mount	
Max Flow Rate	4.9 L/Min 1.25 qpm	
Dimensions	23" x 28" x 9.5"	

System Capacities

The capacity of a filter set is dependent on the quality of the water fed to the system. The worse water fed to a system, the less amount of gallons of pure water it will produce. the better the feed water, the more gallons of pure water the filter pack will produce.

Grain Removal Capacity: 4760 Grains as CaCO3

Feed TDS	Estimated Gallons
500 ppm	135 Gallons
200 ppm	340 Gallons
10 ppm	6800 Gallons

Replacement Filters & Parts

Part Number	Description	
507-USWCB-4510-10-OR	4.5 x 10 Carbon Block Filter With Double O-Ring Seal	
507-USWF-4520-MB-OR	DI Resin Cartridge 4.5" x 20" Double O-Ring Seal 1.5 GPM	
507-USWF-4520-MB-OR	DI Resin Cartridge 4.5" x 20" Double O-Ring Seal 1.5 GPM	
313-FW45-BK	4.5" Plastic Filter Wrench - Black	
646-45-BG-ORING-PACK	3-Pack O-Rings For 4.5" Filter Housings	





Included With System

- System Housing(s) with Reinforced Thread Ports
- Mounting Bracket & Hardware
- (2) DI Cartridges and (1) Carbon Filter
- Lubricated O-Rings
- Installation & Operation Guide

Support & Warranty

- 2-Year Limited Warranty
- Lifetime Technical Support from US-Based Water Experts



