



# DP Big Whole House Ultraviolet Sterilization Unit with Taste, Odor, and Scale Reduction Technology

Designed for point-of-entry applications for bacteriologically contaminated water sources, to provide clean, clear drinking water, protect pipes, appliances, and fixtures from sediment and scale build-up

**Atlas Filtri® DP Big water filtration system reduces Bacteria, Sediment, Taste, Odor, and Scale. This unit is designed for whole house point-of-entry applications and will last 12 months on 15-grain hard water.**

The first stage of the DP Big UV system uses a 5-micron, 10” sediment filter that reduces suspended particles in water. Inside the filter is a special grade of polyphosphate media to reduce scale build-up on pipes, dish washers, fixtures, washing machines, tankless, and heating tank systems. It also reduces iron and protects against corrosion when high levels of chlorides, silicas, and sulfates are present in the water.

The second stage is a 5-micron, 20” carbon block filter cartridge, made from coconut shell carbon. This filter cartridge reduces chemicals in the water like detergents, herbicides, pesticides and THM’s. This allows for bottle-quality water to be available at every faucet.

The third stage is a UV system that monitors the lamp in a quick and easy process. Available with integral LED lamp countdown timer, light lock to protect lamp replacement, and 316L stainless steel. The axil flow reaction allows for optimum efficiency and change-out of the lamp and sleeve without having to drain the housing system. Flow rates stated at 95% UVT at a dose of 30 mJ/cm<sup>2</sup>.



The wall mounted filtration unit is designed to accommodate flow rates up to 8 GPM and handle a maximum pressure of 120 psi at 113°F (45°C) maximum temperature. Standard inlet and outlet connections are 1” NPT. Standard head unit is reinforced polypropylene. Standard O-ring is EPDM.

The melt blown and carbon block cartridges come in a 10” length and are made to comply with the most stringent regulations for applications of drinking water. The 5-micron polypropylene cartridges are suitable for many filtration applications due to the wide chemical-physical compatibility for a variety of water-based solutions. The carbon blocks are designed for high-flow chemical reduction.

The polyphosphate incorporated into the core of the sediment filter is designed to slowly release. It is a low acid media specifically designed for extreme water conditions found in high temperature filtration applications. The media will last up to 12 months on typical water supplies up to 15 grains hard.

UV lamps are coated for consistent UV output throughout the life of the lamp. 10,000 hours LP-HO lamps, with splash-proof controller with constant electronic ballast.

Atlas Filtri is driven to providing our customer with the best available products to meet specific filtration requirements. This is done by using the most advanced manufacturing and design methods. The international patents received come from a constant commitment to research and develop that result in new and innovative products.

Features	Specifications	Contents
<ul style="list-style-type: none"> <li>- Designed for residential filtration applications</li> <li>- Accommodates standard 4.5” OD cartridges</li> <li>- 1” NPT inlet and outlet fitting connections</li> <li>- Pressure-relief feature that includes an O-ring seal. No spring is used that can result in water leaks due to corrosion</li> <li>- Knife-edge flat washer at both cartridge ends create a positive and seal eliminating by-pass</li> <li>- Works with standard double open-ended cartridges with scale reduction media included</li> <li>- 5-micron polypropylene melt blown filters</li> <li>- Polyphosphate glassy beads for slow and controlled release over 12 months</li> <li>- Lamp and sleeve replacement at 12 months</li> </ul>	<p><b>Materials:</b>            Head Connection: Reinforced Polypropylene            Housing Construction: PET            Seal: FDA Grade EPDM            Filter construction: Polypropylene and Coconut Shell Carbon Media            Filter media: Glassy Polyphosphate            UV Housing: Stainless 316L</p> <p><b>Working Conditions:</b>            Working Temperature Range:            Min: 39.2°F (4°C)   Max: 113°F (45°C)</p> <p>Media temperature range of dissolved polyphosphate:            Max: 220°F (104°C) in a heated environment</p>	<ul style="list-style-type: none"> <li>- DP Big DUO Plastic Housings</li> <li>- Powder-coated Black Bracket</li> <li>- Ultraviolet Sterilization System</li> <li>- Ultraviolet Controller</li> <li>- Filter Housing Wrench</li> <li>- Food-grade Lubricant</li> <li>- 5-micron Scale Reduction Filter</li> <li>- 5-micron Carbon Block Filter</li> </ul> <p>Learn more at <a href="http://us.atlasfiltri.com">us.atlasfiltri.com</a></p>

## PRODUCT SPECIFICATION and PERFORMANCE

Listed DP BIG housing model with UV sterilization unit and sediment-scale reduction cartridges

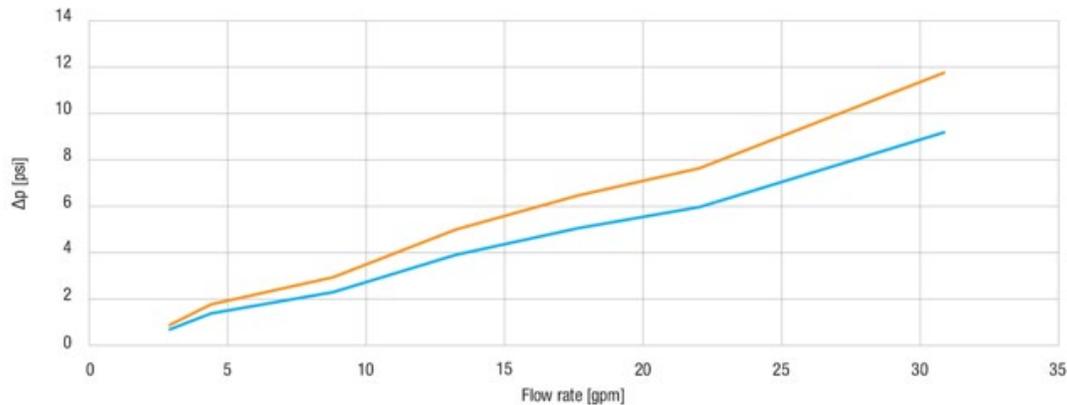
Model	Description	Size	Fitting	Box QTY	Box Size			Weight
ATF4-Z12	DP Big SM 10&20 Duo 1" NPT With UV System	10 & 20"	1"	1	16.1"	26.8"	8.5"	21.56lb
<b>Filter Cartridges</b>								
RA5775608	CPP-SP 10 Big SX 5-micron Sediment-Scale filter	4.5" x 10"	5	6	21.2"	9.8"	14.7"	14.24 lbs
RE4520CT5	CB-AF Big CTO 20 SX 5-micron Carbon Block	4.5" x 20"	5	6	17.2"	12.5"	21.5"	42 lbs

### UV Replacement Components

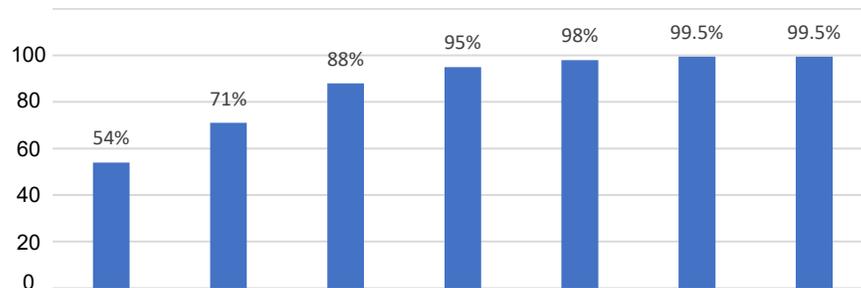
Lamp	RL-420
Sleeve	RQ-420

### FLOW RATE vs PRESSURE DROP $\Delta p$

- Tests carried on 10" elements type CB-AF BIG CTO 10 SX.
- Testing mode: 68°F - 43.5 psi (20°C - 3 bar)



Removal Efficiency  
In (%) Percentage



### Sediment Removal Efficiency in %

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