

## ATLAS ARO 200/400 WATER PURIFICATION SYSTEM Atlas Reverse Osmosis / Deionized Water Systems

Pure water is critical to any successful laboratory weathering test. Impure water can affect both the spray, humidity and lamp cooling system of Ci Series Weather-Ometers<sup>®</sup> resulting in increased maintenance, faster replacement of consumables. Most importantly, unexpected deposits on exposed samples that can affect testing results.

Test methods from ASTM, ISO, and other global standards organizations define specific minimum water purity requirements. The output water from the ARO system exceeds these minimum requirements.

The ARO200 and ARO400 water purification systems from Atlas are designed as an accessory for all our xenon-arc and fluorescent UV weathering instruments. When properly maintained, these systems will supply water that exceeds the purity requirements of all weathering test methods. They reduce up to 99% of the chlorine content, total dissolved solids, as well as silica.

Unlike competitor's **<u>RE</u>**purification systems (which really do nothing more than recirculate spray water), the ARO 200/400 filters city (tap) water into purified water suitable for use in weathering testing instruments.



## System Features

- 11-gallon (ARO200) or 31-gallon (ARO400) storage capacity
- High-rejection membrane. (Each membrane produces 200 gallons/day (AR0200) or 400 gallons/day (AR0400) at 100 PSI
- Built-in electrical shut off valve to prevent damage of the membrane
- Completely assembled, factory-tested, sterilized, and ready for installation
- Simple filter/membrane replacement
- Designed to match DI/RO water capacity needs of all Atlas instruments





## **Cartridge and Membrane Specifications**

**Stage 1** – 5-micron sediment filter made of 100% pure polypropylene fibers. This high capacity filter removes dust, particles and rust

Stage 2 – Granular-activated carbon filter composed of high-performance activated carbon that removed free chlorine, odor, organic contaminants, pesticides and other chemicals **Stage 3** – Mixed-bed DI Filter composed of a specific blend of cation and anion resins known as "mixed bed" reducing total dissolved solids.

Stage 4 – High rejection TFC-type reverse osmosis membranes with the capacity to produce 200 gallons/ day. This membrane removes all other hard water contaminants, including silica.



## **ARO System Connection Diagram and Component Identification**

SPECIFICATIONS	
Production*	AR0200: 757 liters per day (200 gallons per day) AR0400: 1514 liters per day (400 gallons per day)
Storage Tank Capacity	ARO200 (1 Tank): 41.6 liters (11 gallons) ARO400 (2 Tanks): 41.6 liters (11 gallons) + 126 liters (30 gallons)
Operating Pressure	69-862 kPa (10-125 PSI)
Input Water Temperature	optimal 24 <sup>0</sup> (76 <sup>0</sup> F), maximum 29 <sup>0</sup> (85 <sup>0</sup> F)
AC Supply Voltages	110-120V or 220-240V (50/60 Hz)
Weight (System & Tank)	25 kg (55 lbs)
System Dimensions	50 cm (19.7 in) L, 24 cm (9.45 in) W, 80 cm (31.5 in) H
Tank Dimensions	11-gallon: 40 cm (15.7 in) diameter, 58 cm (22.8 in) height 30-gallon (ARO400 only): 42 cm (16.5 in) diameter, 108 cm (42.5 in) height

\* Actual production will depend on purity and temperature of incoming feedwater. Production output stated above based on nominal tap water purity at optimal feedwater temperature. Colder temperatures will reduce output.

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