



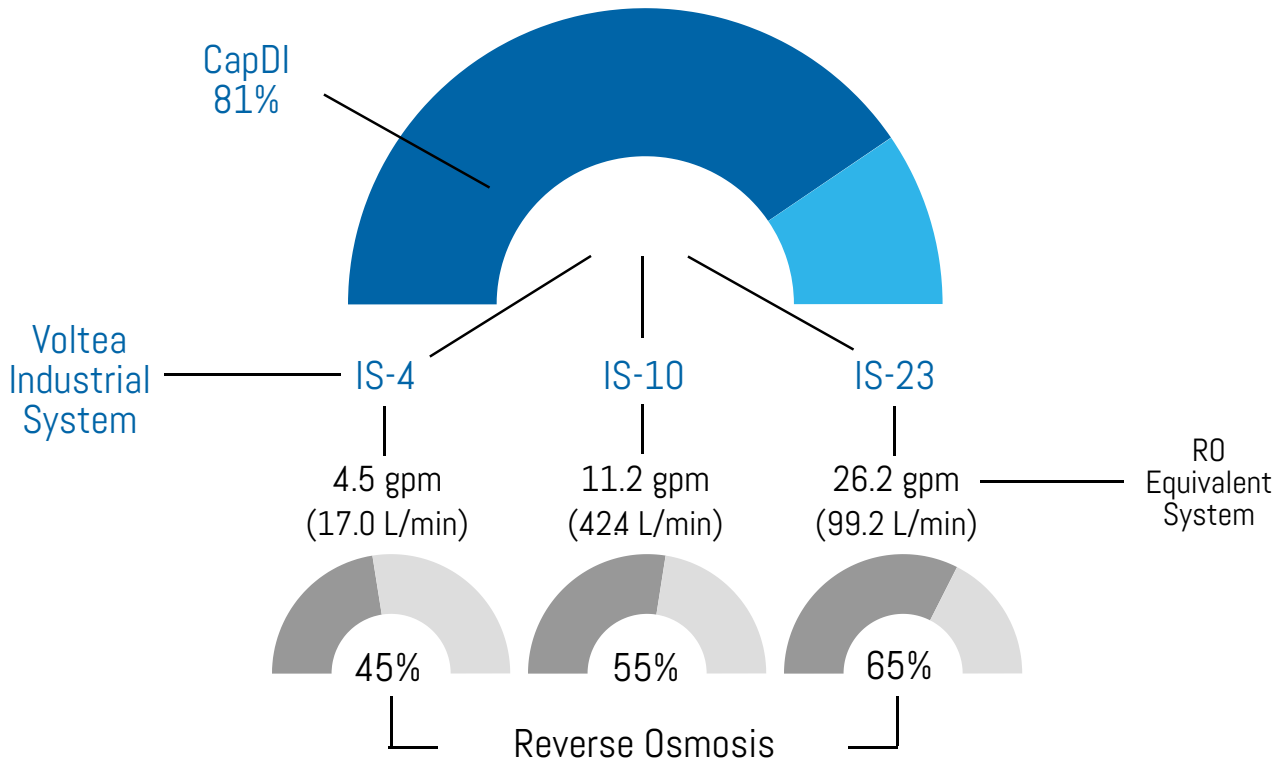
# CapDI<sup>®</sup> vs RO

TECHNICAL COMPARISON

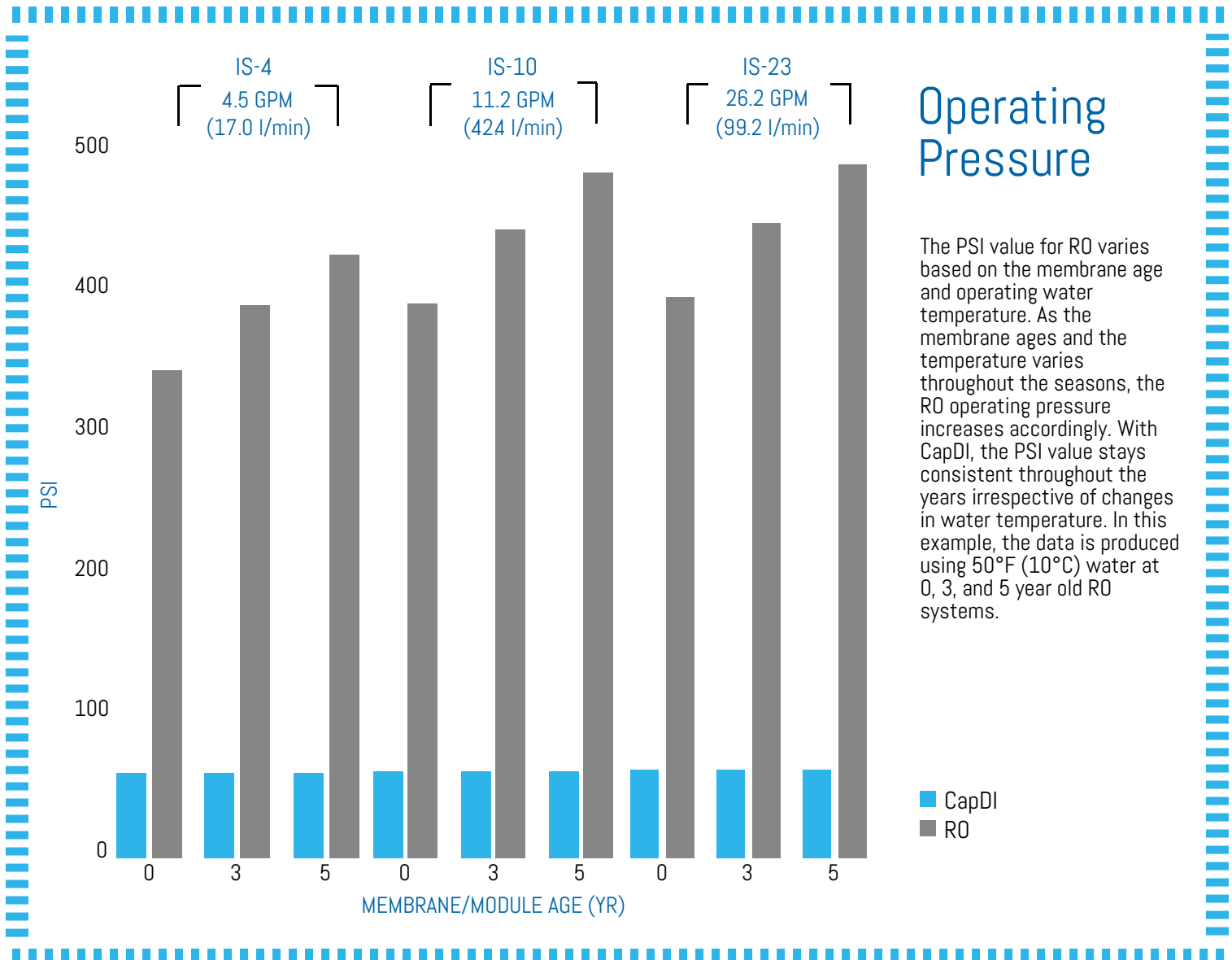
2,000 ppm

This document represents the technical comparison between Voltea's CapDI technology and conventional reverse osmosis (RO) based on product and sales figures. Data included reflects 2,000 ppm TDS and 50°F (10°C) feed water for the study of low water temperature effects. System sizing is based on Voltea's line of Industrial Series systems IS-4, IS-10, and IS-23, and their equivalent sized RO systems at a membrane age of 0, 3, and 5 years.

# Design Water Recovery

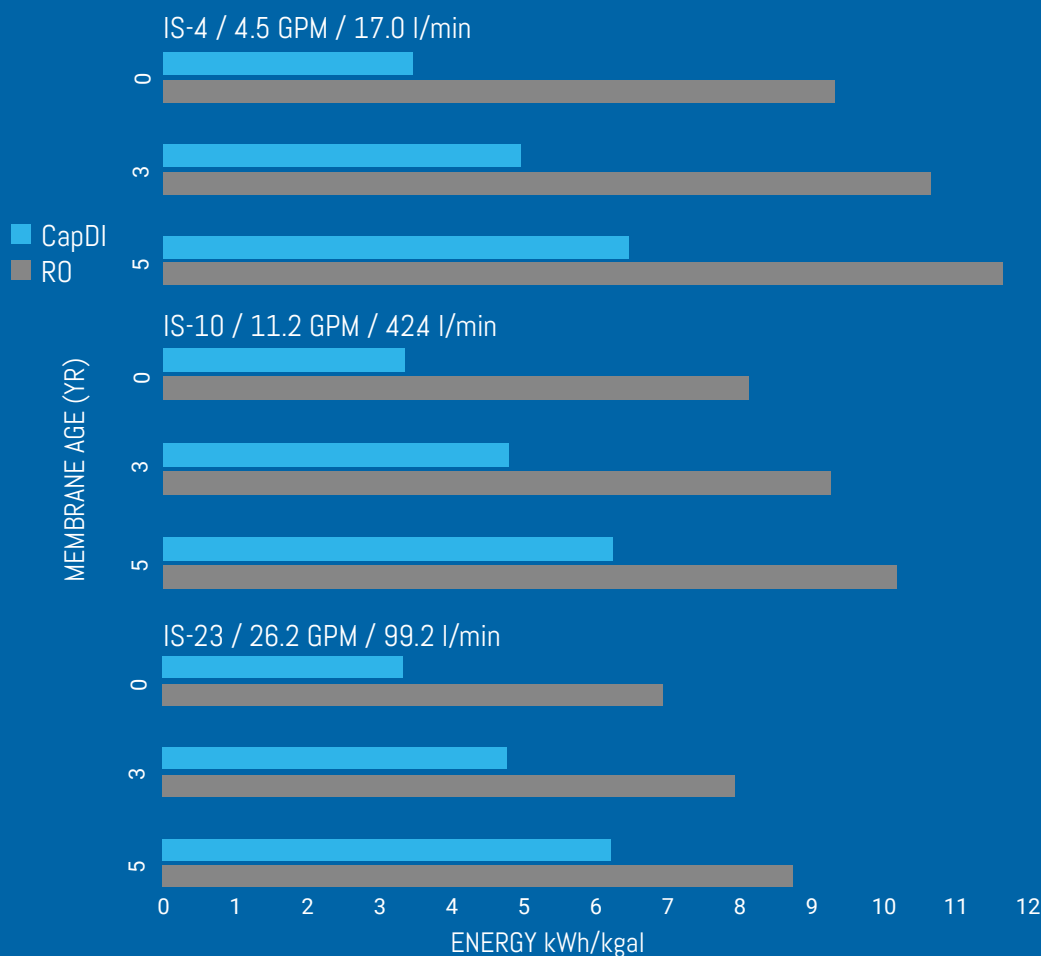


Design water recovery for CapDI remains consistent up to 81% over all system sizes, compared to RO which varies depending on system size and configuration.



# Energy Consumption

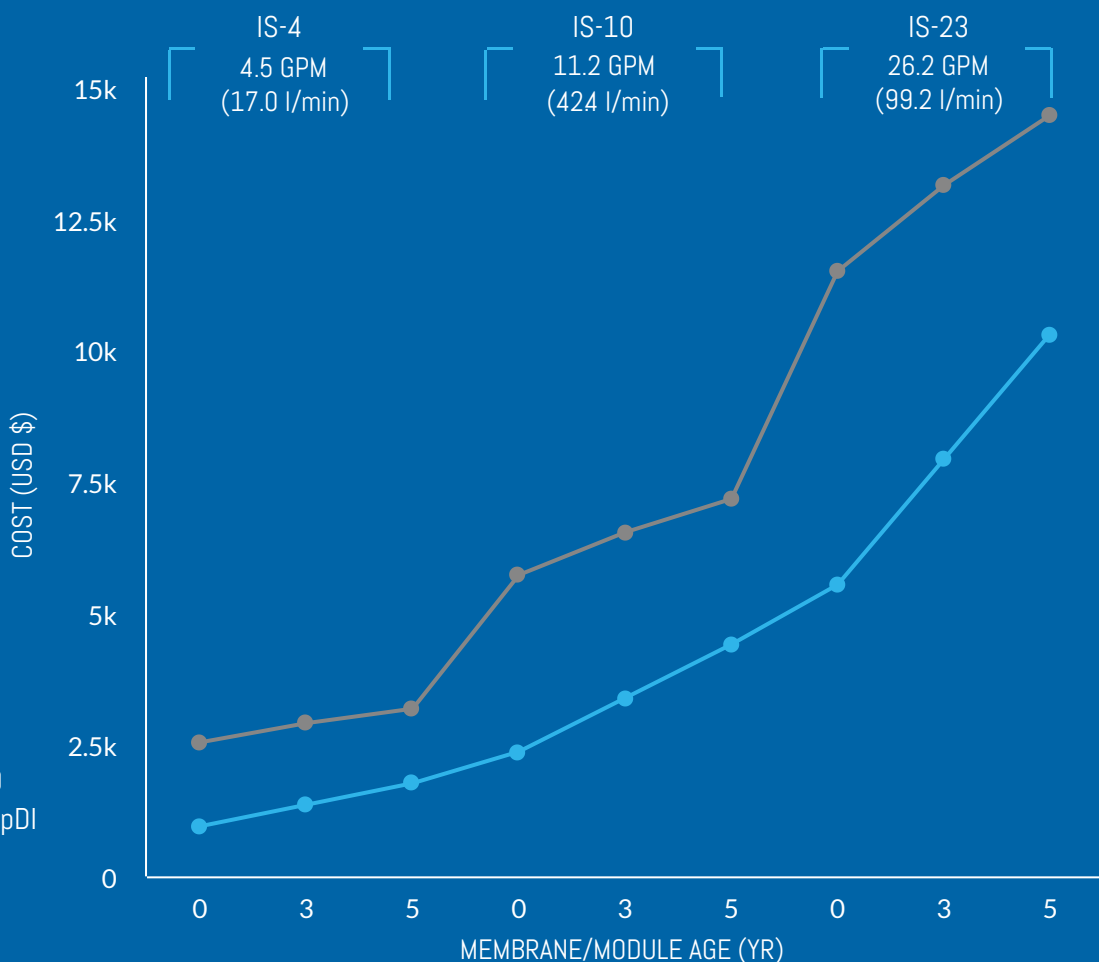
Voltea's CapDI is the industry leader in sustainable deionization as shown by these standout performance statistics on energy consumption and costs. CapDI systems require less energy for daily operations, saving your company on utilities and operational costs all while helping the environment.



## Energy Consumption and Costs

# Energy Costs

Comparatively, energy costs associated with CapDI are a fraction of that of RO, even at higher salinity levels. Sustainable deionization resources are becoming more feasible, and CapDI is leading the way to ensuring clean water at a lower economic and environmental cost.



# Cost of Ownership

The cost of ownership for both CapDI and RO has been broken down into 4 categories; energy, waste water, module/membrane replacement, and CIP/maintenance costs. These figures represent the IS-4, IS-10, and IS-23 CapDI systems and their equivalently sized RO systems over 5 years of ownership.

## CapDI

Estimated Annual Cost of \$7,089

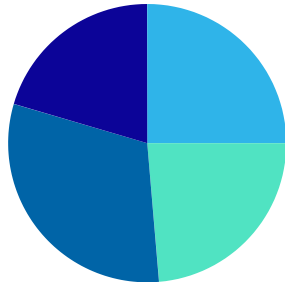
### IS-4

4.5 gpm  
17.0 l/min

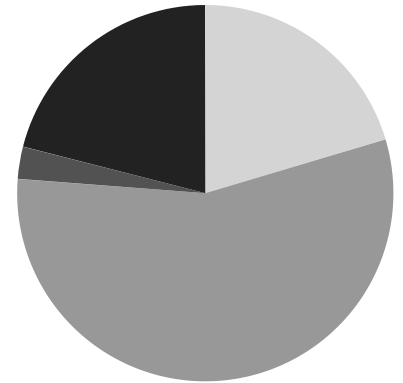
## RO

Estimated Annual Cost of \$15,650

- Energy (25%)
- Waste Water (23.66%)
- Mod Replace (30.91%)
- CIP/Maint. (20.44%)



- Energy (20.38%)
- Waste Water (55.83%)
- Mem Replace (2.77%)
- CIP/Maint. (21.02%)



## CapDI

Estimated Annual Cost of \$17,689

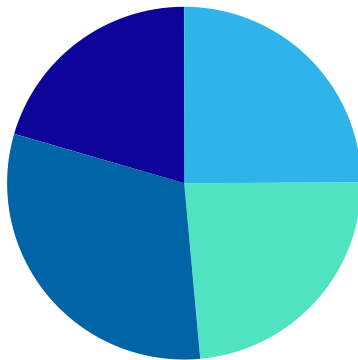
### IS-10

11.2 gpm  
424 l/min

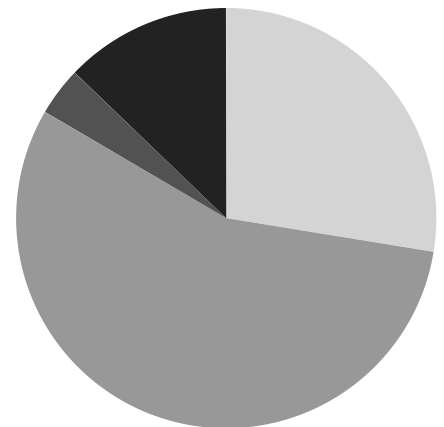
## RO

Estimated Annual Cost of \$26,060

- Energy (24.95%)
- Waste Water (23.6%)
- Mod Replace (30.96%)
- CIP/Maint. (20.48%)



- Energy (27.56%)
- Waste Water (55.89%)
- Mem Replace (3.74%)
- CIP/Maint. (12.82%)



## CapDI

Estimated Annual Cost of \$41,016

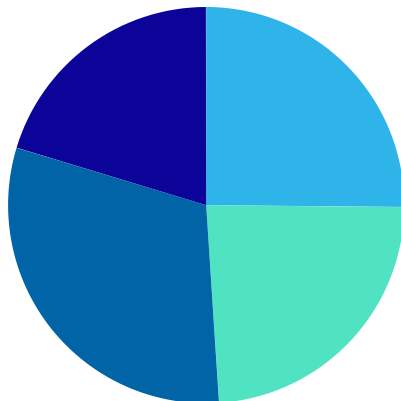
### IS-23

26.2 gpm  
99.2 l/min

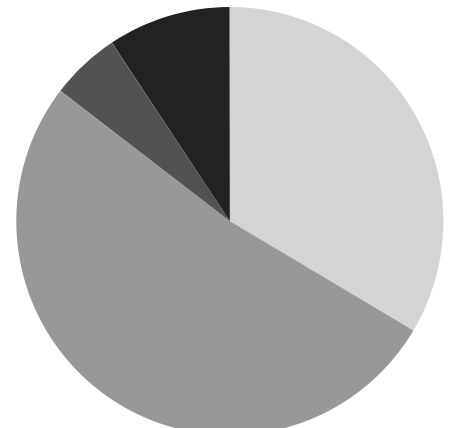
## RO

Estimated Annual Cost of \$43,198

- Energy (25.17%)
- Waste Water (23.81%)
- Mod Replace (30.71%)
- CIP/Maint. (20.31%)



- Energy (33.53%)
- Waste Water (51.89%)
- Mem Replace (5.27%)
- CIP/Maint. (9.32%)



Contact a Voltea Sales Representative to discuss how we can evaluate your water quality and size a system for you!

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