

# Ionpure® VNX High Flow Continuous Electrodeionization (CEDI) Modules

## Ionpure VNX Module—VNX50-2 Continuous Electrodeionization Module

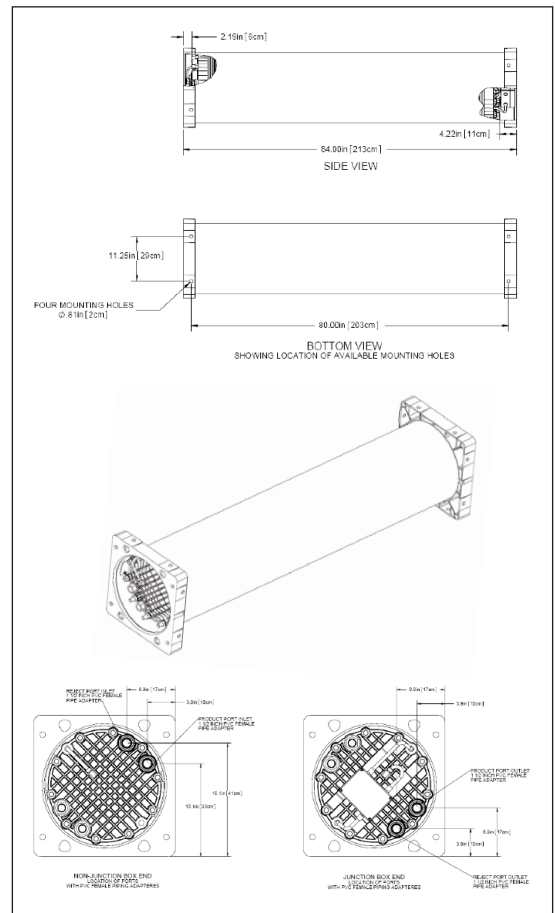
The VNX module is designed with proven Ionpure® continuous electrodeionization (CEDI) technology to produce high purity water. Patent pending, flexmount connectors create a support system for the modules which eliminates the need for a skid, simplifies system design and reduces cost.

Each VNX industrial module has a nominal flow rate of 50.0 gpm (11.4 m<sup>3</sup>/hr). Multiple 50 gpm modules provide for system designs with flow rates up to, and greater than 1000 gpm.

### VNX Series Features

- Generate Mixed Bed deionized water without the use of chemicals
- No need for acid/caustic, neutralization system or exchangeable DI tanks
- Consistent continuous production instead of batch cycle variability
- Most compact footprint in the industry
- Can be operated in both horizontal and vertical configuration
- Significantly lower operating costs than conventional Ion Exchange
- Robust, leak free operation
- Large flow modules reduce system cost and simplify skid design
- Connection fittings included
- On-board junction box

For additional information call 866-876-3340 or visit our web site at [www.ionpure.com](http://www.ionpure.com).



# Ionpure® VNX High Flow Continuous Electrodeionization (CEDI)

## Operating Environment

Installation should be indoors with no direct sunlight and it should have a maximum ambient room temperature of 113°F (45°C).

## Materials Construction

1. Wetted components of the VNX module consist of: PVC, Polyphenylene oxide, polypropylene, silicone, ion-selective membranes, ion exchange resins, and thermoplastic elastomer.
2. Housing is fiberglass reinforced plastic (FRP). Standard color is white with glossy finish. Custom colors and labeling are available.
3. The Flexmount bracket/end-block assembly (patent pending) is an epoxy painted aluminum casting suitable for securing modules to the frames and/or each other in Ionpure approved configurations.

## Quality Assurance Standards

CE marked. Each module is factory tested to meet strict IONPURE and industry standards and is manufactured in an ISO 9001:2000 facility. The final assembled modules are factory tested to ensure interconnector and electrical integrity.

## Ordering Info

1. Part number to use when ordering for vertical or horizontal installation use IP-VNX50-2.
2. Each VNX module has four process connections: Feed, Concentrate Feed, Product, and Reject. PVC adapters (with red dust covers) and plugs are provided with the module.
3. Module electrical power connections are made through an on-board junction box.

Maximum Feed Water Specifications	
Feed Water Conductivity Equivalent, including CO <sub>2</sub> and Silica	< 40 µS/cm
Feed Water Source	RO permeate
Temperature	40–113 °F (5–45 °C)
Inlet Pressure	20–100 psi (1.4–7 bar)
Maximum Total Chlorine (as Cl <sub>2</sub> )	<0.02 ppm
Iron (Fe)	<0.01 ppm
Manganese (Mn)	<0.01 ppm
Sulfide (S <sup>-</sup> )	<0.01 ppm
pH	4–11
Total Hardness (as CaCO <sub>3</sub> )	<1.0 ppm
Dissolved Organics (TOC as C)	<0.5 ppm
Silica (SiO <sub>2</sub> )	<1.0 ppm

Typical Module Performance	
<b>Operating Parameters</b>	
Recovery	90–95%
Flow Rate: minimum	25.0 gpm (5.7 m <sup>3</sup> /hr)
Flow Rate: nominal	50.0 gpm (11.4 m <sup>3</sup> /hr)
Flow Rate: maximum	75.0 gpm (17.0 m <sup>3</sup> /hr)
DC Voltage	0–600
DC Amperage	0–13.2
<b>Product Water Quality</b>	
Product Resistivity	>16 megohm-cm (see note below)
Note: Actual performance may be determined using the IP-Pro projection software available from Ionpure.	
Silica (SiO <sub>2</sub> ) Removal	90–99%, depending on feed conditions

Physical Specifications					
Diameter	Width	Height	Length	Shipping Weight	Operating Weight
17.5" (44.45 cm)	20.0" (50.8 cm)	20.0" (50.8 cm)	84.0" (213.3 cm)	610 lbs (276.7 kg)	825 lbs (374.2 kg)

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