

# LENNTECH

info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289

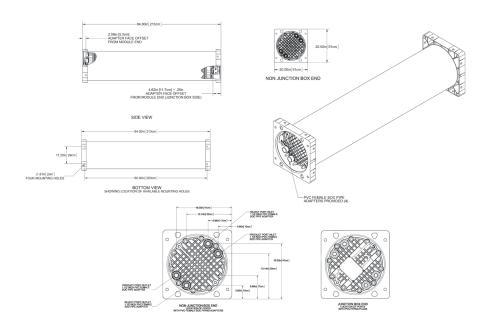


# IONPURE® VNX HIGH FLOW CONTINUOUS ELECTRODEIONIZATION (CEDI) MODULES

## **IONPURE VNX MODULE — VNX55-2**

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

Each VNX industrial module has a nominal flow rate of 55 gpm (12.5 m<sup>3</sup>/hr). Multiple 55 gpm modules provide for system designs with flow rates up to, and greater than 1,000 gpm.



### **VNX Series Features**

- Generates 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 sealing with through-port gasket
- Large flow modules reduce system cost and simplify skid design
- Connection fittings are included
- On-board junction box

#### **OPERATING ENVIRONMENT**

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

#### **MATERIAL CONSTRUCTION**

- Wetted components of the VNX module consist of: PVC (adapters), nylon/ABS, polyphenylene oxide, polypropylene, silicone, ion-selective membranes, ion exchange resins and thermoplastic elastomer.
- Housing is fiberglass reinforced plastic (FRP). Standard color is white with a glossy finish. Custom colors and labeling are available.
- The proprietary Flexmount<sup>™</sup> bracket/end-block assembly is an epoxy painted aluminum casting suitable for securing modules to the frames and/or each other in lonpure<sup>®</sup> system approved configurations.

#### **QUALITY ASSURANCE STANDARDS**

CE marked. Each module is factory tested to meet strict industry standards and is manufactured in an ISO 9001 and ISO 14000 quality and environmental management system.

#### **ORDERING INFORMATION**

- Use model number IP-VNX55-2 when ordering for vertical or horizontal installation.
- Each VNX module has four process connections; feed, concentrate feed, product and reject. PVC adapters (with dust covers) and plugs are provided with the module. High purity 50mm polypropylene adapters are also available.
- Module electrical power connections are made through an on-board junction box.

#### **Maximum Feed Water Specifications**

| Feed Water Conductivity<br>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 $Cl_2$ )   | < 0.02 ppm                 |
| Iron (as Fe)  | < 0.01 ppm                 |
| Manganese (as Mn)   | < 0.01 ppm                 |
| Sulfide (S <sup>-</sup> )   | < 0.01 ppm                 |
| рН  | 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**

| Operating Parameters               |   |  |  |  |  |
|------------------------------------|---|--|--|--|--|
| Recovery                           | 90 - 95%                                  |  |  |  |  |
| Flow Rate: Minimum                 | 25.0 gpm (5.7 m³/hr)                      |  |  |  |  |
| Flow Rate: Nominal                 | 55.0 gpm (12.5 m³/hr)                     |  |  |  |  |
| Flow Rate: Maximum                 | 82.5 gpm (18.7 m³/hr)                     |  |  |  |  |
| DC Voltage                         | 0 - 600                                   |  |  |  |  |
| DC Amperage                        | 0 - 13.2                                  |  |  |  |  |
| Product Water Quality              |   |  |  |  |  |
| Product Resistivity                | >16 megohm-cm*                            |  |  |  |  |
| Silica (SiO <sub>2</sub> ) Removal | 90 – 99%,<br>depending on feed conditions |  |  |  |  |

\*Actual performance may be determined using the IP-Pro projection software available from lonpure.

#### **PHYSICAL SPECIFICATIONS**

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



LENNTECH info@lenntech.com Tel. +31-152-610-900 www.lenntech.com Fax. +31-152-616-289

Ionpure and Flexmount are trademarks of Evoqua, its subsidiaries or affiliates, in some countries.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.