

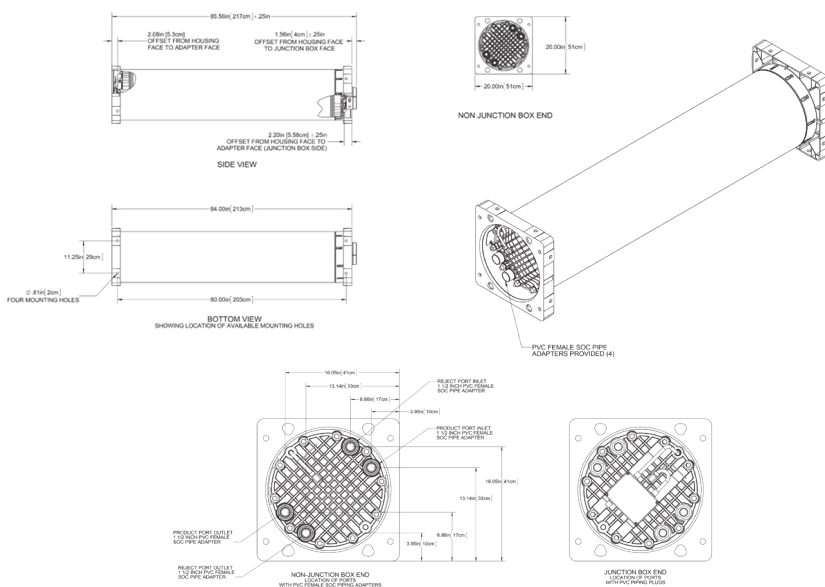
IONPURE® VNX-CDIT RANGE OF HIGH FLOW CONTINUOUS ELECTRODEIONIZATION (CEDI) MODULES

## IONPURE® VNX-CDIT RANGE OF HIGH FLOW CONTINUOUS ELECTRODEIONIZATION (CEDI) MODULES

### IONPURE VNX MODULE - VNX30CDIT-2

The Ionpure® VNX-CDIT module is designed with proven continuous electrodeionization (CEDI) technology to produce high purity water. Performance has been optimized for suitability on most single-pass reverse osmosis feed waters. CDIT is designed for feed water with up to 4 ppm of hardness greatly widening the application window for CEDI technology.

Each VNX30-CDIT module has a nominal flow rate of 30 gpm (6.8 m<sup>3</sup>/hr). Multiple 30 gpm modules provide for system designs with flow rates up to, and greater than 1,000 gpm. VNX15-CDIT is also available and offers a nominal flow rate of 15 gpm (3.4m<sup>3</sup>/hr).



### VNX-CDIT Series Features

- 4 ppm as CaCO<sub>3</sub> max feed water hardness
- 2 ppm as SiO<sub>2</sub> max feed water silica
- Expanded CO<sub>2</sub> removal capabilities
- In most cases can operate on single pass RO permeate
- Thin cell technology optimized for feed water hardness tolerance
- No need for acid/caustic, neutralization systems or tank exchanges
- Significantly lower operating cost compared to conventional ion exchange systems
- Robust guaranteed leak free operation
- Continuous production of consistent quality
- Junction box for convenient and safe power connections
- Available as 30 gpm (6.8 m<sup>3</sup>/hr) or 15 gpm (3.4m<sup>3</sup>/hr) nominal flow rates

For additional information on our VNX30 series call +1 866.876.3340 or visit our website at [www.ionpure.com](http://www.ionpure.com).

## OPERATING ENVIRONMENT

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

## MATERIALS 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 glossy finish. Custom colors and labeling are available.
- The proprietary Flexmount™ bracket/end-block assembly is an epoxy painted aluminum casting suitable for securing modules to the frames and/or each other in Ionpure® 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. IFANCA HALAL Certified.

## ORDERING INFORMATION

| Item No.  | Model No.      | Description |
|-----------|----------------|-------------|
| W3T215828 | IP-VNX30CDIT-2 | VNX30-CDIT  |
| W3T268747 | IP-VNX15CDIT-2 | VNX15-CDIT  |

- 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.
- High purity 50mm butt weld connection kits adapter(4)/plug(4):  
Natural Polypropylene - Part #IP-VNX-CK-PP-2
- Standard 1-1/2" female socket connection kits adapter(4)/plug(4):  
PVC - Part #IP-VNX-CK-PVC-2
- Module electrical power connections are made through an on-board junction box.

## PHYSICAL SPECIFICATIONS

| Product    | Diameter         | Width           | Height          | Length           | Shipping Weight    | Operating Weight   |
|------------|------------------|-----------------|-----------------|------------------|--------------------|--------------------|
| VNX30-CDIT | 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) |
| VNX15-CDIT | 17.5" (44.45 cm) | 20.0" (50.8 cm) | 20.0" (50.8 cm) | 44.0" (112 cm)   | 315 lbs (143 kg)   | 420 lbs (190.5 kg) |

## Maximum Feed Water Specifications

|  |                            |
|--|----------------------------|
| Feed Water Conductivity Equivalent, including CO <sub>2</sub> and Silica | < 100 µS/cm                |
| Feed Water Source  | RO permeate                |
| Temperature  | 41 - 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 (as Fe)   | < 0.01 ppm                 |
| Manganese (as Mn)  | < 0.01 ppm                 |
| Sulfide (as S <sup>2-</sup> )  | < 0.01 ppm                 |
| pH   | 4 - 11                     |
| Total Hardness (as CaCO <sub>3</sub> )                                   | < 4.0 ppm                  |
| Dissolved Organics (TOC as C)  | < 0.5 ppm                  |
| Silica (as SiO <sub>2</sub> )  | < 2.0 ppm                  |

## Typical Module Performance

### Operating Parameters

|                    | VNX30-CDIT                       | VNX15-CDIT                        |
|--------------------|----------------------------------|-----------------------------------|
| Recovery           | 80% - 90%                        |                                   |
| Flow Rate: Minimum | 15 gpm (3.4 m <sup>3</sup> /hr)  | 7.5 gpm (1.7 m <sup>3</sup> /hr)  |
| Flow Rate: Nominal | 30 gpm (6.8 m <sup>3</sup> /hr)  | 15 gpm (3.4 m <sup>3</sup> /hr)   |
| Flow Rate: Maximum | 45 gpm (10.2 m <sup>3</sup> /hr) | 22.5 gpm (5.1 m <sup>3</sup> /hr) |

### Power Parameters

|            |         |
|------------|---------|
| DC Voltage | 0 - 600 |
|------------|---------|

### Hardness Required Amperage

|                        |               |              |
|------------------------|---------------|--------------|
| 0 - 1.5 ppm Hardness   | 0 - 13.3 amps | 0 - 6.6 amps |
| 1.5 - 2.5 ppm Hardness | 0 - 8.0 amps  | 0 - 4.0 amps |
| 2.5 - 4.0 ppm Hardness | 0 - 4.0 amps  | 0 - 2.0 amps |

### Product Water Quality

|                                     |                |                |
|-------------------------------------|----------------|----------------|
| Product Resistivity                 | >16 megohm-cm* | >16 megohm-cm* |
| Silica (SiO <sub>2</sub> ) Removal  | ≥ 95%          | ≥ 95%          |
| Sulphate (SO <sub>4</sub> ) Removal | ≥ 99.5%        | ≥ 99.5%        |
| Sodium (Na <sup>+</sup> ) Removal   | ≥ 99.5%        | ≥ 99.5%        |
| Chloride (Cl <sup>-</sup> ) Removal | ≥ 99.5%        | ≥ 99.5%        |

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



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