VNS-MAX

High-Flow EDI Module

Chemical-free polishing for high-purity water systems



NOMINAL PRODUCT FLOW	PRODUCT RESISTIVITY
15 m^3/h	>17 MΩ·cm

DC VOLTAGE RANGE	DC CURRENT RANGE
0-300 V	0-6 A

RETROFIT POSITIONING

Replacement alternative for Ionpure® / Xylem PW-VNX55EP-2 EDI installations

Designed for simpler high-flow EDI system integration

- **High-flow architecture**
  15 m^3/h product flow per module reduces module count in large systems.
- **All-filled chambers**
  Diluting and concentrating chambers are both resin-filled for stable electrical performance.
- **Simplified hydraulics**
  No salt dosing, no concentrate recirculation, and no separate electrode-water discharge required.
- **Compact integration**
  RO-style installation concept reduces footprint, piping, valves and auxiliary components.

Independent CM replacement option. Final retrofit suitability must be verified against project hydraulic, electrical and connection requirements.

SHANGHAI CM ENVIRONMENTAL TECHNOLOGY CO., LTD.
No. 1188 Jiangyue Road, Minhang District, Shanghai, China

+86 182 2109 4035
www.shanghai-cm.com | info@shchenmo.com

Technical Specifications

VNS-MAX High-Flow Continuous Electrodeionization Module

Model	VNS-MAX
Product type	Continuous Electrodeionization (CEDI) module
Nominal product flow	15 m^3/h
Working principle	Ion-exchange membranes + mixed-bed resin
Core materials	Acid-resistant ion-exchange membranes, imported resin, Pt-coated titanium electrodes
Product water resistivity	RO permeate feed: >17 MΩ·cm; DI water feed: >18MΩ·cm
DC voltage range	0-300 V
DC current range	0-6 A
Dilute / concentrate chambers	Fully resin-filled
Salt dosing	Not required
Concentrate recirculation	Not required
Separate electrode-water discharge	Not required
Flow arrangement	Two inlets / two outlets; co-current
Process connection	1.5 in. ANSI socket, SCH 80 PVC
Conversion adapters	Included / available
Standard warranty	3 years

Engineering note

Performance is based on the supplied VNS-MAX design data. Final operating setpoints depend on feed-water quality, recovery target and system configuration.

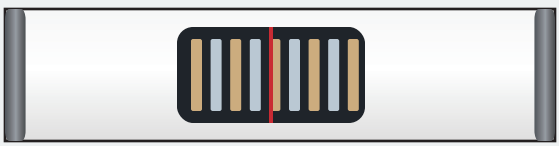
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Engineering Design & Retrofit Integration

High-flow architecture with compact RO-style installation

VNS-MAX INTERNAL DESIGN



FRP housing | Resin-filled cell stack | End plate

FLOW DISTRIBUTION



Disc-type distributor plate

Multi-seal, high-pressure structure

DESIGN ADVANTAGES

01 Pressure & sealing

Disc-shaped flow distributors and multiple sealing points improve pressure resistance and leak control.

02 Electrical efficiency

Low-resistance ion-exchange membranes and optimized resin filling improve current utilization.

03 High-flow architecture

Two sub-stacks can be integrated within one FRP housing to increase through put per module.

04 Lower system complexity

Fewer modules can reduce piping, valves, instruments, power-supply channels and skid footprint.

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PW-VNX55EP-2 RETROFIT NOTE

VNS-MAX is positioned as an independent replacement alternative for legacy Ionpure / Xylem PW-VNX55EP-2 installations. Before replacement, verify the existing module envelope, port layout, hydraulic operating window, DC power output, controls and feed-water conditions.

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