

CP Series EDI Modules

Product Profile

Based on the traditional EDI technology, revolutionary innovation is carried out to the internal structure of Canpure EDI Module with counter-current full-packing technique adopted, which broadens the water supply requirements of EDI, features simple operation and results in low operating costs.

Product Features

No salt Injection

Canpure EDI does not consume salt and recycle the concentrate in operation, which saves much expense and makes the system much simpler.

Counter current

Concentrate and electrolyte stream are flowing into EDI in opposite directions to feed water can avoid fouling effectively, then it broadens the feed water limit adequately.

Low energy consumption

Canpure EDI filled with resin reduces the EDI module resistivity significantly, which reduces the energy consumption largely.

High quality materials and components

High quality ion-exchange membrane and appropriate degree of resin compaction make the EDI work effectively.

Simple arrangement, installation, operation and electricity safety

Easier to array modules side-by-side on a skid. Toe power connector of Canpure EDI is waterproof.

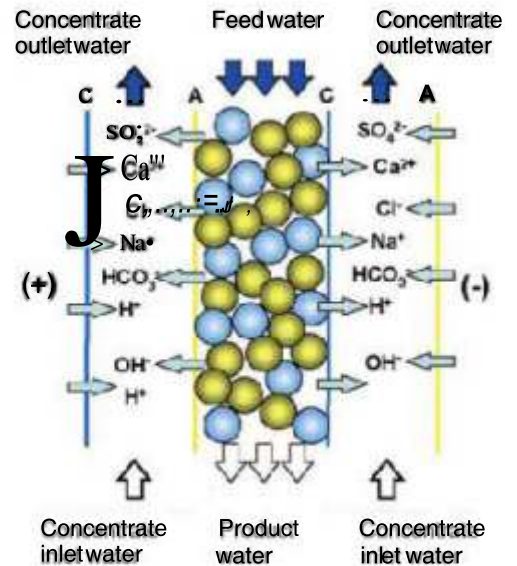


Electrical Specification

- The requirements of DC power used in EDI systems, including ripple and current control, are quite unique. To meet these requirements, Canpure has specially designed DC power units for EDI using IGBT technology.
- Digital display
- High frequency and high efficiency, high PF(power factor), high reliability.
- Low ripple, low noise and small foot print.
- Individually controlled.

Applications

- Advanced boiler feed water desalination
- Purified water for petrochemical and chemical purposes
- Purified water for biochemical and pharmaceutical purposes
- Purified water for electronic industry
- Purified water for laboratories



Operating principle of counter-current EDI

Technical Parameters of CP Series EDI Modules

module parameters					
Modules	CP-5800S	CP-4SOOS	CP-3600S	CP-2000S	CP-1000S
Size (mm)	616x296x810	616x296x615	616x296x515	616x296x405	616x296x315
Weight (kg)	160	130	110	80	68
Product Flow (m ³ /h)	5.0 - 6.5	4.0 - 5.1	3.0 - 3.8	2.0 - 2.6	1.0 - 1.5
Concentrate Flow (m ³ /h)	0.5 - 0.65	0.4 - 0.51	0.3 - 0.38	0.2 - 0.26	0.1 - 0.15
Electrolyte Flow (m ³ /h)	0.06				
DC Power	CB-500	CB-500	CA-350	CA-350	CA-350
Operation Voltage (V)	100 - 450	80 - 300	50 - 240	50 - 160	20 - 100
Operation Current (A)	0.5 - 5.5				

Feed water requirements	
TEA (Total Exchanged Anion)	Maximum 35 ppm
Applied Feed Pressure	Maximum 0.4 MPa (60 psi)
Feed-Product Pressure Drop*	0.15 ± 0.02 MPa (22 ± 3 psi)
Concentrate Pressure Drop*	0.1 ± 0.02 MPa (15 ± 3 psi)
Hardness (as CaCO ₃)	Maximum 1 ppm
Organics (as TOC)	Maximum 0.5 ppm
Oxidizers (Cl ₂ /O ₂)	Not detectable
Metals (Fe, Mn, etc.)	Maximum 0.01 ppm
SiO ₂	Maximum 0.5 ppm
SDI _s	< 1.0
Conductivity	Maximum 60 µstem (as NaCl)
Operating Temperature	5 - 35 °C (41-95 °F)
Operating pH Range	7.0 - 9.0