Pure Water Made Simple

EDI Simplifies Continuous Pure Water Production

EDI Produces Pure Water Continuously, Requires No Regeneration

10 gpm EDI module with sanitary polypropylene piping and quality monitor

EDI Cell utilizing thin plate technology design

The iPure Performance Guarantee

We guarantee that your iPure system will produce high purity water to your exacting specifications before it leaves our factory.

As innovators in water treatment systems, we've pre-engineered an easy-to-operate, cost effective unit that produces high purity water continuously, without the need for costly regeneration chemicals.

iPure's EDI incorporates the best and most reliable electrodeionization technologies and is a direct replacement for conventional polishing deionization. EDI is designed for use with existing pretreatment and distribution equipment.

Why Choose an EDI System?

- EDI units produce consistent on-spec water continuousl, minimum 10mega-ohm resistivity.
- Each unit is delivered completely assembled, factory tested and ready for field installation, which means you can start producing on-spec water quickly.
- EDI cell resins require no costly chemicals and no time-consuming shutdowns for regeneration.
- EDI modules are the smallest and lightest units per unit flow volume processed. Units are energy efficient as well.
- Low initial cost and reduced operating expenses make the EDI unit an economical choice.

Is your water treatment system performing the way it should?

We will evaluate your system using our proprietary Pure Water System Assessment to show you how you can

Take advantage of new cost and labor savings

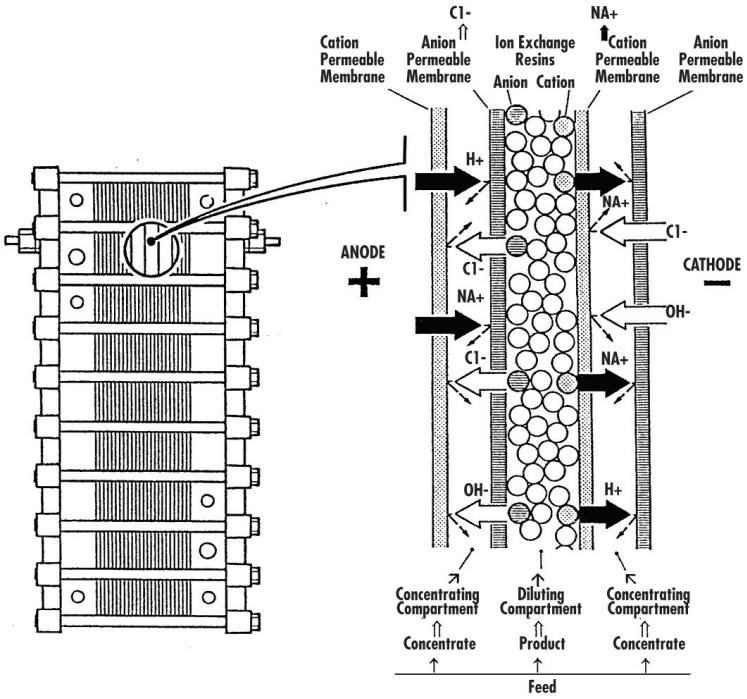
Utilize updated technologies

Maintain optimum system operation

Call today for a NO-COST system assessment. 973.622.0440

EDI Unit Features

Electro-deionization Technology



EDI technology combines membranes and ion-exchange resins in a single process that is capable of producing a continuous supply of ultra-pure water.

Here's how it works: Ion-exchange resins are suspended between ion-selective membranes and electrodes, which are operated under the influence of a DC potential. The ion-exchange resins effectively remove ions from the reverse osmosis permeate while being continuously regenerated by the DC field. The ion-selective membranes operate using the same principles and materials as ion-exchange resins, and are used to remove specific ions that have been captured by the ion-exchange resins.

The ion-exchange membranes and resins are spaced in a plate and frame arrangement to produce alternating purifying and concentrating compartments. By "stacking" these compartments various flow capacity EDI "cells" are created.

Standard Features

- Modular design for easy expansion
- Epoxy-coated steel frame for floor mounting
- Adjustable regulated power supply
- Product and concentrate flow indicators
- Low flow interlock switch to provide cell protection
- Stainless steel pressure indicators
- PVC pipe manifold
- H-O-A operation via RO interlock

Optional Features

- Temperature compensated resistivity monitor with alarm
- Automatic inlet shutoff valve to prevent flow during unit shutdown
- Outlet water quality divert manifold
- Booster pump system
- UV sterilization module
- TOC reduction module
- Sub-micron filtration system
- Hot water sanitizable construction
- Sanitary Stainless Steel, Polypropylene or PVDF permeate manifold system
- Allen Bradley™ control system
- UL/CE labels
- IQ & OQ validation packages

For detailed system specifications please visit www.iPureH2O.com, or contact us at 973.622.0440 or Sales@iPureH2O.com

Specifications may be changed without notice. Consult the factory for details.

November 2005 Ver 1

EDI - iXL Series

Specifications

Model	iEDI-0030	iEDI-0060	iEDI-0075	iEDI-0150	iEDI-0400	iEDI-0700
Design						
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feed Water Source***	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)
Standard Recover Rate+	85%-95%	85%-95%	85%-95%	85%-95%	85%-95%	85%-95%
Flow Rates						
Permeate Flow Rate* gpm (lpm)	0.25-0.75 (1.0-2.8)	0.5-1.5 (1.9-5.7)	0.25-0.75 (1.0-2.8)	0.5-1.5 (1.9-5.7)	1.5-4.5 (5.7-17.0)	2.5-7.0 (9.5-26.5)
Feed Flow Rate gpm (lpm)	0.35-0.85 (1.3-3.2)	0.65-1.65 (2.5-6.3)	0.35-0.85 (1.3-3.2)	0.65-1.65 (2.5-6.3)	1.75-4.75 (6.6-18.0)	3.05-7.55 (11.5-28.6)
Concentrate Flow Rate gpm (lpm)	0.05 (0.2)	0.1 (0.4)	0.05 (0.2)	0.1 (0.4)	0.2 (0.8)	0.5 (1.9)
Electrate Flow Rate gpm (lpm)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)
Connections						
Feed (Inch)	3/8" QF	3/8" QF	1/2" QF	1/2" QF	1/2" NPT	3/4" NPT
Permeate (Inch)	3/8" QF	3/8" QF	1/2" QF	1/2" QF	1/2" NPT	3/4" NPT
Concentrate Drain (Inch)	3/8" QF	3/8" QF	3/8" QF	3/8" QF	3/8" QF	3/8" QF
Electrate Drain (Inch)	1/4" QF	1/4" QF	1/4" QF	1/4" QF	1/4" QF	1/4" QF
Cell Configuration						
Cell Size	XL-100 R	XL-200 R	XL-100 R	XL-200 R	XL-300 R	XL-400 R
Cell Quantity	1	1	1	1	1	1
Electrical						
Standard Voltage	120VAC/1PH/ 60 HZ	220VAC/1PH/ 60 HZ	120VAC/1PH/ 60 HZ	220VAC/1PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ
Dimensions**						
L x W x H inch (cm)	18 x 24 x 54 (46 x 61 x 137)	18 x 24 x 54 (46 x 61 x 137)	18 x 24 x 54 (46 x 61 x 137)	18 x 24 x 54 (46 x 61 x 137)	44 x 26 x 36 (112 x 66 x 91)	44 x 26 x 36 (112 x 66 x 91)
Weight lb. (Kg)	200 (91)	200 (91)	250 (113)	250 (113)	250 (113)	250 (113)

Model	iEDI-1000	iEDI-1400	iEDI-2000	iEDI-3000	iEDI-4000
Design					
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feed Water Source***	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)	RO Permeate (1 Pass)
Standard Recover Rate+	85%-95%	85%-95%	85%-95%	85%-95%	85%-95%
Flow Rates					
Permeate Flow Rate* gpm (lpm)	6.0-10.0 (22.7-37.9)	5.0-14.0 (18.9-53.0)	12.0-20.0 (45.4-75.7)	18.0-30.0 (68.1-113.6)	24.0-40.0 (90.8-151.4)
Feed Flow Rate gpm (lpm)	6.1-10.1 (23.1-38.2)	6.1-15.1 (23.1-57.2)	13.6-21.6 (51.5-81.8)	20.4-32.4 (77.2-122.6)	27.2-43.2 (103.0-163.5)
Concentrate Flow Rate gpm (lpm)	0.25 (1.0)	1.0 (3.8)	1.5 (5.7)	2.25 (8.5)	3.0 (11.4)
Electrate Flow Rate gpm (lpm)	0.05 (0.2)	0.1 (0.4)	0.1 (0.4)	0.15 (0.6)	0.2 (0.8)
Connections					
Feed (Inch)	3/4" NPT	1" NPT	1 1/4" NPT	1 1/2" NPT	1 1/2" NPT
Permeate (Inch)	3/4" NPT	1" NPT	1 1/4" NPT	1 1/2" NPT	1 1/2" NPT
Concentrate Drain (Inch)	3/8" QF	3/8" QF	3/8" QF	3/8" QF	3/8" QF
Electrate Drain (Inch)	1/4" QF	1/4" QF	1/4" QF	1/4" QF	1/4" QF
Cell Configuration					
Cell Size	XL-500 R	XL-400 R	XL-500 R	XL-500 R	XL-500 R
Cell Quantity	1	2	2	3	4
Electrical					
Standard Voltage	460VAC/3PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ	460VAC/3PH/ 50/60 HZ
Dimensions**					
L x W x H inch (cm)	44 x 26 x 36 (112 x 66 x 91)	44 x 28 x 36 (112 x 71 x 91)	44 x 28 x 36 (112 x 71 x 91)	48 x 37 x 37 (384 x 94 x 94)	48 x 46 x 37 (485 x 117 x 94)
Weight lb. (Kg)	275 (125)	300 (137)	350 (159)	400 (181)	500 (227)

EDI - iEXL Series

Specifications

Model	iEDI-015E XL	IEDI-025E XL	IEDI-050E XL	IEDI-075E XL	IEDI-100E XL
Design					
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feed Water Source***	RO Permeate (1 Pass) RO Permeate (2 Pass)	RO Permeate (1 Pass) RO Permeate (2 Pass)	RO Permeate (1 Pass) RO Permeate (2 Pass)	RO Permeate (1 Pass) RO Permeate (2 Pass)	RO Permeate (1 Pass) RO Permeate (2 Pass)
Standard Recover Rate+	85%-95%	85%-95%	85%-95%	85%-95%	85%-95%
Flow Rates					
Permeate Flow Rate* gpm (lpm)	15.0-20.0 (56.8-75.7)	25.0-30.0 (94.6-113.6)	50.0-60.0 (189.3-227.1)	75.0-90.0 (283.9-340.7)	100.0-120.0 (378.5-454.2)
Feed Flow Rate gpm (lpm)	17.0-22.0 (64.3-83.3)	28.0-33.0 (106.0-124.9)	56.0-66.0 (212.0-249.8)	84.0-99.0 (317.4-374.7)	112.0-132.0 (423.9-499.6)
Concentrate Flow Rate gpm (lpm)	1.5 (5.7)	2.5 (9.5)	5.0 (18.9)	7.5 (28.4)	10.0 (37.9)
Electrate Flow Rate gpm (lpm)	0.5 (1.9)	0.5 (1.9)	1.0 (3.8)	1.5 (5.7)	2.0 (7.6)
Connections					
Feed (Inch)	1 1/4" NPT	1 1/2" NPT	1 1/2" NPT	2" NPT	2" NPT
Permeate (Inch)	1 1/4" NPT	1 1/2" NPT	1 1/2" NPT	2" NPT	2" NPT
Concentrate Drain (Inch)	1/2" QF	1/2" QF	1/2" QF	1" NPT	1" NPT
Electrate Drain (Inch)	3/8" QF	3/8" QF	3/8" QF	3/8" QF	3/8" QF
Cell Configuration					
Cell Size	XL-600 R	XL-700 R	XL-700 R	XL-700 R	XL-700 R
Cell Quantity	1	1	2	3	4
Electrical					
Standard Voltage	480VAC/3PH/ 50/60 HZ	550VAC/3PH/ 50/60 HZ	550VAC/3PH/ 50/60 HZ	550VAC/3PH/ 50/60 HZ	550VAC/3PH/ 50/60 HZ
Dimensions**					
L x W x H inch (cm)	52 x x 42 (132 x 127 x 107)	52 x 32 x 42 (132 x 81 x 107)	52 x 47 x 42 (132 x 119 x 107)	52 x 62 x 42 (132 x 158 x 107)	52 x 77 x 42 (132 x 196 x 107)
Weight lb. (Kg)	900 (410)	1000 (455)	1250 (568)	1500 (682)	1750 (796)

* Product Flow rates and recovery are based on equipment test parameters
** Does not include operating space requirements
*** Treatment ability of the EDI system is dependent on feed water quality. Performance projections must be run for each installation.
**** Operation on 2 pass RO permeate supply will enhance unit performance and outlet water quality but is limited. Contact factory for specific details..

Operating Limits

Maximum Feed Temperature °F (°C)	95 (35)	Maximum Free Chlorine ppm (Oxidizers)	<0
Minimum Feed Temperature °F (°C)	40 (5)	Maximum TDS ppm	12
Maximum Ambient Temperature °F (°C)	120 (49)	Maximum Hardness gpg++	<0
Minimum Ambient Temperature °F (°C)	40 (5)	Maximum pH (Continuous)	9.5
Maximum Feed Pressure psi (bar) - XL/EXL	75 / 100 (5 / 7)	Minimum pH (Continuous)	5
Minimum Feed Pressure psi (bar)	45 (3)	Maximum Metal Ions (ppm)	<0
Maximum Operating Pressure psi (bar)	75 / 100 (5 / 7)	Maximum Organics (TOC) (ppm)	<0.5
Maximum SDI Rating SDI	<0	Maximum Silica (ppm)	<0.5

Test Parameters: 12 ppm TDS, De-Chlorinated, Single Pass RO Permeate Feed Water, 60 psig (4 bar) Feed Pressure, 77 Degrees F (25 Degrees C), Recovery As Stated, 7.0 pH. Data taken after 60 minutes of operation.
+Low temperatures and high feed water TDS levels will significantly affect systems production capabilities. Computer projections should be run for individual applications which do not meet or exceed minimum and maximum operation limits.
++Scale prevention measures must be taken to prolong cell life.
Product information is subject to change without notice. For more detailed information on this or any of our other products please visit the web a www.ipureh2o.com or contact us via email at sales@ipureh20.com.