

STANDARD FEATURES

- Single skid configuration
- PVC piping
- Conductivity analyzer on feed, product and reject
- GF/Signet
- Flowmeter on feed, product and reject
- Cleaning connections
- Power rectifier for DC power source
- Nema 4 carbon steel box
- Allen Bradley PLC

OPTIONS

- Automatic inlet, outlet and recycle valve
- Clean in place skid
- Silica analyzer
- Sodium analyzer



Electrodeionization (EDI)

GENERAL

EDI, Electrodeionization is a membrane process that removes ions from the water to produce ultra pure water. EDI is comprised of ion exchange resin and membranes. The module gets a DC voltage applied across it to help drive the ions into the reject stream. This allows the pure water to exit the module through the product stream.

WATERTRAK™'s EDI systems are normally offered as polishing units after single or dual pass Reverse Osmosis units.

DESIGN CONDITIONS

Conductivity:	< 40 $\mu\text{s}/\text{cm}$
pH:	7-8
Temperature:	45-95°F
Hardness:	< 1 ppm as CaCO_3
SiO_2 :	< 0.5 ppm
CO_2 :	< 5 ppm

EDI Matrix HP SERIES																	
						Power Supply Unit				Manifold Pipe Sizing (TP Size Per Train)							
Model	Feed Flow Rate	Product Flow Rate (MAX) 25°C	Electrode Flow Rate	Reject Flow Rate	No. of Modules @25°C Water Temp.	DC Volt (Max)		Current (Max)		Feed (Per Train)	Reject (Per Train)	Product (Per Train)	Elect. (Per Train)	Shipping weight (LBS)	Dimensions (Inches)		
	GPM	GPM	GPM	GPM		(V)1	(V)2	(I) 1	(I)2	Inch	Inch	Inch	Inch		H	W	D
EDI-HP-1-40	45.0	40.0	1.00	4.0	4	350.0	550	10	12	2.0	0.75	2.0	0.5	1,800	80	80	80
EDI-HP-1-60	67.5	60.0	1.50	6.0	6	350.0	550	15	18	3.0	0.75	3.0	0.5	2,150	80	90	80
EDI-HP-1-80	90.0	80.0	2.00	8.0	8	350.0	550	20	24	3.0	0.75	3.0	0.5	2,600	80	106	80
EDI-HP-1-100	112.5	100.0	2.50	10.0	10	350.0	550	25	30	3.0	1.0	3.0	0.5	3,100	80	124	80
EDI-HP-1-120	135.0	120.0	3.00	12.0	12	350.0	550	30	36	4.0	1.0	4.0	0.5	3,400	80	140	80
EDI-HP-2-40	90.0	80.0	2.00	8.0	8	350	550	20	24	3.0	0.75	3.0	0.5	2,600	80	106	85
EDI-HP-2-60	135.0	120.0	3.00	12.0	12	350	550	30	36	3.0	1.0	3.0	0.5	3,300	80	144	85
EDI-HP-2-80	180.0	160.0	4.00	16.0	16	350	550	40	48	3.0	1.0	3.0	0.5	3,900	80	175	85
EDI-HP-2-100	225.0	200.0	5.00	20.0	20	350	550	50	60	4.0	1.0	4.0	0.5	4,600	80	205	85
EDI-HP-2-120	270.0	240.0	6.00	24.0	24	350	550	60	72	4.0	1.0	4.0	0.75	5,300	80	230	85

*Maximum feed pressure to EDI units is 60 psig

* For feedwater temperature < 20°C the system product flowrate will be reduced by approximately 20%; however recovery will be maintained at 90%.

