

100 gpm = 23 m³/h

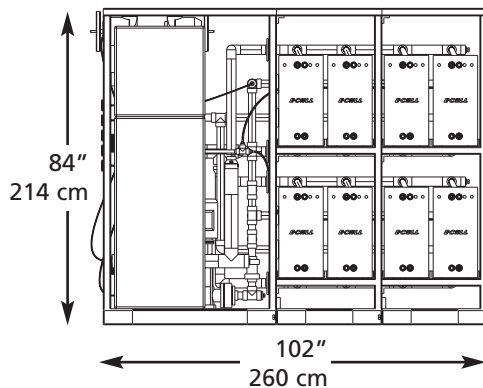
E-Cell System™

E-Cell™ is a revolution in chemical-free deionization. E-Cell™'s robust, modular electrodeionization (EDI) technology is cost-effective for all flow rates.

No regeneration chemicals are needed, no hazardous waste stream is produced, operation is simple and continuous, and facility requirements are reduced.

100 gpm

23 m³/h



E-CELL™

100 gpm

23 m³/h

Process Design Parameters		
Parameter	US Units	Metric Units
System Product Flow	48 to 100 gpm	10.9 to 22.7 m ³ /h
Nominal Recovery	90 to 95%	90 to 95%
Temperature	40 to 100°F	5 to 38°C
Inlet Pressure	45 to 100 psig	3.1 to 6.8 bar
Feed to Product delta P	20 to 35 psi	1.4 to 2.4 bar
Dimensions	102" W x 53" D x 84" H	260 cm W x 135 cm D x 214 cm H
Product Pipe Material	PP	PP
Shipping Weight	4000 lb	1820 kg
Operating Weight	4150 lb	1890 kg

Operating Conditions			
Condition		US Units	Metric Units
Electrical	Maximum	36 amps @ 600V DC	36 amps @ 600V DC
Product Outlet	Flow Range	48 to 100 gpm	10.9 to 22.7 m ³ /h
	Quality	>16 MOhm.cm	>16 MOhm.cm
	Pressure Drop	20 to 35 psi	1.4 to 2.4 bar
	Temperature Rise	4.3°F maximum	2.4°C maximum
Electrolyte Outlet	Flow	1.2 to 2.8 gpm to Drain	4.5 to 10.8 lpm to Drain
	pH	7.0 to 9.0	7.0 to 9.0
Concentrate Bleed	Flow	Determined by Recovery Rate	Determined by Recovery Rate
Concentrate + Electrolyte Inlet	Total Flow	36 gpm	8.16 m ³ /h
	Pressure	5 psi < Feed Water Pressure	0.3 bar < Feed Water Pressure
	Concentrate Conductivity	150 to 1250 µS/cm	150 to 1250 µS/cm
Concentrate Make-up	Flow	Determined by Recovery Rate	Determined by Recovery Rate
	Water Quality	Same as Feed Inlet	Same as Feed Inlet

Feed Water Requirements			
Constituent	US Units	Metric Units	Range
TEA including CO ₂	ppm CaCO ₃	mg/l CaCO ₃	<25.0
pH			5.0 to 9.0
Hardness	ppm CaCO ₃	mg/l CaCO ₃	<1.0
Silica (Reactive)	ppm	mg/l	<0.5
TOC	ppm	mg/l	<0.5
Free Chlorine	ppm	mg/l	<0.05
Fe, Mn, H ₂ S	ppm	mg/l	<0.01

NOTE: The feed water to the E-Cell™ must be RO permeate or equivalent.

Power Requirements		
Voltage	Hz	Max AC Current (Amps)
575	60	27.0
460	60	33.8
380	60	40.9
220	60	70.6
415	50	37.5
380	50	40.9
Maximum power consumption 24.2 kw		

NOTE: All 3 phase power

E-CELL™

E-Cell Corporation

52 Royal Road, Guelph, Ontario, Canada N1H 1G3

Tel: +1 (519) 836-2260 x521 Fax: +1 (519) 836-0982 Toll Free: 1 (888) 386-5132 (USA and Canada)

Website: www.ecell.com E-mail: ecell@ecell.com

