

E-Cell™ MK-2E Stack

Ultrapure Water for Power, Semiconductor, General Industry



E-Cell electrodeionization (EDI) technology is the industry standard for chemical-free ultrapure water production. E-Cell stacks offer a robust alternative to mixed bed technology. E-Cell stacks utilize electric current to remove ions from reverse osmosis permeate, bringing the water to the high level of purity required in today's applications. No regeneration

chemicals are needed, and no hazardous waste stream is produced. Operation is continuous and requires much less space than conventional mixed bed technology.

The modular design allows single or multiple stack configurations, providing a cost-effective treatment across all flow rates.

Parameter	US Units	SI Units
Product Water		
Flow rate per stack	7.5-20 gpm	1.7 m ³ /h to 4.5 m ³ /hr
Resistivity	> 16 MOhm-cm	>16 MOhm-cm
Silica (SiO ₂)	< 5 ppb*	< 5 ppb*
Sodium	< 2 ppb	< 2 ppb
Boron	> 95%	> 95%
Feed Water (RO Permeate or Equivalent)		
Feed TEA	< 49 ppm*	< 49 ppm*
Silica (SiO ₂)	< 500 ppb	< 500 ppb
TOC	< 0.5 ppm	< 0.5 ppm
Temperature range	40 to 100°F	4.4 to 38°C
Hardness	< 0.5 ppm	< 0.5 ppm
Hardness with CLS option	< 3 ppm	< 3 ppm
Operating Parameters		
Nominal recovery	90% to 95%	90% to 95%
DC power consumption (nom.)	0.2 to 1.5 kWh/1000 US gal	0.05 to 0.4 kWh/m ³
Feed pressure	45 to 100 psig	3.1 to 6.9 bar
Pressure drop	20 to 50 psid	1.4 to 3.4 bar
Dimensions	12" W x 19" D x 24" H	30 cm W x 48 cm D x 61cm H
Weight	202 lb	92 kg

* Actual performance may vary depending on site conditions. Reference E-Calc projection software to verify actual performance.