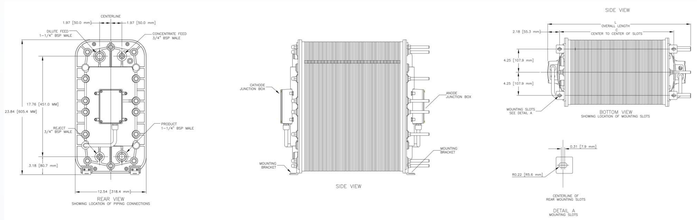
EIMD-HP

The Aquacells EIMD - HP module is designed specifically for hot water sanitization applications and is widely used in pharmaceuticals, biotechnology and cosmetics industries. The module is made of high-temperature resistant material to meet instantaneous heating and cooling requirement, and produce a constant flowrate of high-purity water without the need for chemical regeneration.



Superior Performance

- Resistant to hot water sanitizable at 185 °F/85 °C± 5 °C
- Resistant to sanitization pressure of 30psi/2bar
- Stable performance after more than 150 cycles of hot water sanitization
- Able to withstand instantaneous temperature changes to minimize downtime
- No need for salt and concentrated water recirculation
- Wetted materials of construction comply with FDA requirement

Quality Assurance Standards

Factory has passed ISO 9001 certification. Modules that are CE certified are factory tested to meet the strict industrial standards as well as Aquacells' standards

Operating Environment

Installation should be indoors away from direct sunlight, and in an environment with a maximum ambient temperature of 113°F (45°C)

Feed Water Specifications	
Feed Water Conductivity Equivalent including CO_2 and Silica	< 45μS/cm
Temperature	40-113°F (5-45℃)
Inlet Pressure	1.4-7bar (20-100psi)
Maximum Free Chlorine(as Cl_2)	< 0.05 ppm
Iron (Fe)	< 0.01 ppm
Manganese (Mn)	< 0.01 ppm
Sulfide (S^{2-})	<0.01 ppm
pH	4-11
Total Hardness (as $CaCO_3$)	<1.0 ppm
Dissolved Organics (TOC as C)	< 0.5 ppm
Silica (SiO_2)	< 1.0 ppm

Typical Module Performance	
Typical Recovery	90-95%
Maximum Feed Pressure	7bar (100psi)
Maximum Feed Temperature	113°F (45℃)
Sanitization Temperature at 30 psi (2.0 bar)	185°F (85℃)
DC Voltage*	0-600 V
DC Amperage	0-10 A
Product Conductivity	<0.1μS/cm
Silica (SiO_2) Removal	90-99% depending on feed water

* Voltage required depends on module size

Physical Specifications		
Module Number	Overall Length (L)	Center to Center of Slots (C)
EIMD-05HP	257.0 mm[10.12"]	189 mm[07.44"]
EIMD-10HP	347.7 mm[13.69"]	275 mm[10.82"]
EIMD-20HP	513.0 mm[20.20"]	395 mm[15.55"]
EIMD-30HP	696.5 mm[27.42"]	567 mm[22.32"]
EIMD-50HP	907.3 mm[35.72"]	786 mm[30.94"]

Flow Rate and Weights				
Module Number	Nominal Product Flow gpm(m^3/h)	Min Pruduct Flow gpm(m^3/h)	Net Weight kg(lbs)	Operatihg Weight kg(lbs)
EIMD-05HP	2.0-3.0 (0.44-0.67)	1.0 (0.22)	34(75)	39(86)
EIMD-10HP	5.0-7.5(1.1-1.65)	2.5 (0.55)	50(111)	60(133)
EIMD-20HP	9.0-13.5 (2.0-3.1)	4.5 (1.0)	71(157)	91(201)
EIMD-30HP	15.0-22.5 (3.4-5.1)	7.5 (1.7)	104(230)	134(296)
EIMD-50HP	22.0-34.0(5.0-7.5)	11 (2.5)	144(318)	194(428)

The information provided in this brochure contains general descriptions or performance characteristics that may not always apply as described in actual use cases or may change due to further product development. An obligation to provide the respective characteristics shall only exist if expressly agreed upon in the terms of the contract.

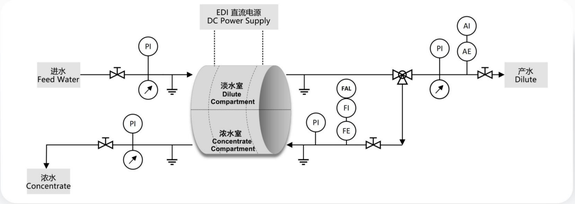
INNOVATION

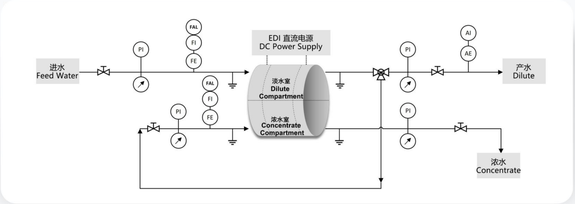
Special filling material

- Anode compartment filled with antioxidant conductive polymer materials to prevent oxidation and burning out

Patented PID process(as shown in the diagram below)

- Reduces LSI index to prevent scaling
- Reduction of chloride ions minimizes the risk of oxidation
- Recovery rate is increased to 98%
- Concentrated water is 100% reusable





CASES

A pharmaceutical project