



HYEN's
Electrolyzer technology



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Electrolyzers

Gas Production

	Hydrogen	Oxygen
Max. output pressure	15 barg (Optional 30 barg)	1 atm
Purity without additional purification	>99,95%	>99,8%
Dew point	$\leq -15^{\circ}\text{C}$ (Optional $\leq -50^{\circ}\text{C}$)	

Hydrogen Drying System

Industrial drying system with automatic regeneration.

The hydrogen purity according to ISO 14687-2 for the use in fuel cell vehicles is met.

Max. hydrogen purity	99,999%
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Feeding Water (Tap Water)

Water quality acc.	98/83/EG	Pressure	2 to 6 bar
		Temperature	+5 to +35 °C
Water treatment	Integrated Reverse Osmosis System (ROS) + de-ionisation system (Optional)		

Power Input

Voltage	From 400 V AC to high voltage Alternatively a transformer can be included
Frequency	50 Hz, 60 Hz

Safety Norms and Regulations

Compliance	Machine directive 2006/42/CE
	Pressurised equipment directive 2014/68/UE
	Low voltage directive 2014/35/UE
	Electromagnetic compatibility directive 2014/30/UE
	ATEX directive 2014/34/UE
	CE Mark



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ORION *Efficient. Pure. Plug&Play.*

Proton Exchange Membrane

	ORION		
	250	500	1000
Hydrogen Production			
H ₂ flow rate [Nm ³ /h]	2.5	5	10
Oxygen Production			
O ₂ flow rate [Nm ³ /h]	1.25	2.5	5
Operating range			
Hydrogen production [%]	0.2-2.5	0.5-5	0.5-10
Feeding Water			
Consumption [l/h]	1.5	3	6
Installed Power			
Electrolysis [kW]	11.5	23	46
Power [kW]	12,25	24,5	49
Specific Energy			
Stack consumption [kWh/Nm ³ H ₂]		4.6	
System consumption [kWh/Nm ³ H ₂]		4.9	
Footprint			
Dimensions [L X W X H, mm]		780 x 900 x 1800	
Weight	345	390	435
Connections			
Gas outlet [inch]		¼"	
Network		Ethernet - Modbus TCP/IP	



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AQULIA *Efficient. Pure. Plug&Play.*

Anion Exchange Membrane

	ORION		
	250	500	1000
Hydrogen Production			
H ₂ flow rate [Nm ³ /h]	2.5	5	10
Oxygen Production			
O ₂ flow rate [Nm ³ /h]	1.25	2.5	5
Operating range			
Hydrogen production [%]	0.2-2.5	0.5-5	0.5-10
Feeding Water			
Consumption [l/h]	1.5	3	6
Installed Power			
Electrolysis [kW]	11.5	23	46
Power [kW]	12,25	24,5	49
Specific Energy			
Stack consumption [kWh/Nm ³ H ₂]		4.6	
System consumption [kWh/Nm ³ H ₂]		4.9	
Footprint			
Dimensions [L X W X H, mm]		780 x 900 x 1800	
Weight	375	420	465
Connections			
Gas outlet [inch]		¼"	
Network		Ethernet - Modbus TCP/IP	



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