



H₂B₂



Main Characteristics		EL1N
Electrolysis Type	PEM (Proton exchange membrane, caustic free)	
Number of Cell Stacks	1	
Hydrogen Gas Production		
Max. Nominal Hydrogen Flow	1 Nm ³ /h	
Hydrogen Flow Range	5 -100%	
Operating Pressure	1-20 barg (14.5-290 psig)	
Hydrogen Purity (before Gas Purification)	> 99.9% ; < 5 ppm O ₂ ; H ₂ O saturated	
Hydrogen Purity (after Gas Purification)	99.999%; < 1 ppm O ₂ ; < 1 ppm H ₂ O	
Electrical Requirements		
Voltage	400 VAC ± 10% (3Ph+N) / 4800 VAC ± 10% (3Ph+N)	
Frequency	50 Hz ± 5% / 60 Hz ± 3%	
Power (BoP + Stack)	6.3 kW	
Stack Consumption	4.7 kWh/Nm ³ H ₂	
AC Power Consumption (BoP + Stack)	6.3 kWh/Nm ³ H ₂	
Tap Feed Water		
Consumption	< 2 l/hr	
Conductivity	< 2,000 uS/cm (T 25 °C (77 °F))	
Pressure	2-6 barg (29-87 psig)	
Temperature	+5 °C to +40 °C (+41 °F to +104 °F)	
Demineralized Water (after Water Treatment)		
Consumption	< 1 l/Nm ³ H ₂	
Quality	> 10 MΩcm (<0.1 uS/cm); TOC < 30 ppb	
Control System		
PLC	Fully automated and unattended with 7" color touch screen	
Communication	Modbus TCP/IP or Profinet (RJ45 port)	
Environmental Conditions		
Ambient Temperature Range	+5 °C to +45 °C (+41 °F to +113 °F)	
Humidity	0 to +95% (non-condensing)	
Air Ventilation	Available from a non-hazardous area	
Installation Area	Indoor/Outdoor	
Dimensions and weight		
Dimensions (LxWxH)	Cabinet (1.8m x 0.6m x 1.8m) (5.9ft x 1.9ft x 5.9ft)	
Approx. Weight	450 kg (992 lb)	
Standards & Regulations		
Compliance	CE, ISO 22734-1 /NFPA 2-2016 & NFPA 70	
Other Characteristics		
Duty Cycle	100% (24/7)	
Start-up Time (from Stand-by)	< 1 sec	
Cold Start Time	< 5 min	

Included	Additional Options
Hydrogen Cooling System	Oxygen Processing System
Emergency Shutdown System	Hydrogen Purification System (SAE J2719 September 2011)
Overpressure Relief System	Water Treatment System
Redundancy on Critical Safety Parameters	