

LABGREEN product family is a high-production polymer membrane electrolyzer with the following main properties:

- KEY FEATURES
- ✓ Quick and easy installation
 - ✓ Scalable and modular with small footprint
 - ✓ High performance.
 - ✓ Safe, automated & remote operation
 - ✓ No water loss.
 - ✓ Low maintenance requirement



HYDROGEN PRODUCTION

Nominal Production Rate	0,006 Nm ³ /hr- 0,6 Nm ³ /hr
Nominal Power Consumption by Volume	4,6 kWh/Nm ³ ± 1%
Nominal Power Consumption by Mass	50,5 kWh/kg ± 1%
H ₂ Purity	Up to 99,999 % (ISO 14687)
H ₂ Outlet Pressure	Up to 6 bar adjustable
Operation Range	5 % to 100 %
Dew Point Temp.	-71 °C
H ₂ /O ₂ Ports	Customized to client's needs.

ELECTRICAL SPECIFICATIONS

Nominal Load	30 W - 3000 W
Electrical Connection	Three Phase 220 or 380V; 50/60Hz
Nominal system efficiency	Nominal Load: +/- 60%
AC/DC Rectifier	In accordance with project requirements
Max Power	1,25 kVA - 37,5 kVA
Rectifier	AC-DC or DC-DC
Electrical Safety	H ₂ detector

CONTROL SYSTEM

Communications	Ethernet // ModBus // TCP IP
Remote Operating	Control and communications via web-based platform

DI WATER SPECIFICATIONS

Water quality	ASTM Type II (<1 MicroS/cm)
Water consumption ratio	1 Lt H ₂ O → 1.2Nm ³ H ₂

OPERATING CONDITIONS

Physical	Laptop Tower.
Ambient Conditions	- 12 °C ↔ 40 °C Humidity < 80%.
Response time	From Standby < 10 seconds Cold Start: +/-3 min
Weight	90 kg - 300 kg
Working conditions	45 °C - 50 °C
Location	Up to C% (ISO 12944:2018)
Max Noise (dB)	< 75
IP Rating	IP20

APPLICABLE STANDARDS

Hydrogen Generators by Water Electrolysis	ISO 22734:2019
Pressure Equipment Directive	2014/68/EU
Council Low Voltage Directive	2014/35/EU
Electro-Magnetic Compatibility	2014/30/EU
ATEX Directive	2014/34/EU
Functional Manufacturing Safety standards	ENISO 12100:2010, IEC 61508, IEC 62061, 2006/42/CE
Industrial Machine Guidelines	

OPTIONS

- Gas analyzers.
- Gas flow meters.
- Communication Packages.
- Power Meters.
- Pressure meters.
- Other upon requirements