



ELECTROLYZER CELL TESTING

- Single cells and small stacks
- Up to 1,000 W power range
- Water or alkaline electrolyte (option) supply with recirculation and temperature adjustment
- Level controlled water knock out with automated gas / liquid separation
- Several pressure control modes up to 50 bar
- Fully automated for safe, reliable, unattended operation
- Extended safety features including PLC control
- Flexible test modes with powerful TestWork software
- Integrated electrochemical analysis (option) like EIS or CV

HORIBAFuelCon

Evaluator EC



GENERAL FACTS

Standard electrolyte temperature	95 °C (203 °F)
Footprint L x W x H, [meter] (inches)	1.1 x 0.8 x 1.65 (43" x 32" x 65")
Back pressure control range	up to 50 bar / 725 psi
Thermal management	Independent loops and control for anode and cathode recirculation and test item
Exhaust treatment	Powerful gas / liquid separation; exhaust flow metering optional
Gas analysis (option)	Hydrogen, oxygen
Data logging	SQL data base

ELECTRIC SPECIFICATION

Power range	Up to 1,000 W
Power supply	Up to 400 A / 10 V
Electrochemical characterization (option)	TrueData-EIS (impedance analysis) TrueData-CYV (cyclic voltametry)

The HORIBA FuelCon electrolyzer test station of the Evaluator EC line allows automated testing of electrolyzer single cells and short stacks in the range up to 1,000 W.

The test system has several fully automated pressurization modes (by nitrogen or other inert gases or by product gases).

The operator can simulate with the flexible TestWork software fully automatic several working conditions like stationary operating points, polarization curves or the reproduction of typical intermittent power sources like solar panels or wind energy.

Anode and cathode are supplied with pressurized DI water supply with high precision pumps including liquid flow meter, conductivity and temperature control. The supply can be realized in a recirculation or a direct mode.

Please feel free to download the latest information available at www.horiba-fuelcon.com. If you have any questions, please do not hesitate to contact us. We will be happy to support you and discuss your testing requirements!

HORIBA FuelCon reserves the right to make changes at any time without notice.

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SAFETY

CE conformity marking (according to)
EMC directive 2014/30/EC
Low voltage directive 2014/35/EC
ATEX directive 2014/34/EC
General product safety directive 2001/95/EC
Machinery directive 2006/42/EC
Pressure equipment directive 2014/68/EC

Risk assessment
DIN EN ISO 13849
DIN EN ISO 12100

OPTIONS

Water balance measuring system
H₂ input line on cathode for TrueData-CYV operation
Pre-pressurization of cell/stack by high-pressure nitrogen gas input line