



KEY COMPONENT AND MATERIAL TESTING

FOR HYDROGEN ENERGY

PEM ELECTROLYZER
AND FUEL CELL
MEA/SINGLE CELL TESTING

ORIGIN-E PEM
ELECTROLYZER
CELL HARDWARE

GDL/PTL MATERIAL
TESTER



www.tensortechs.com



info@tensortechs.com

PEM ELECTROLYZER AND FUEL CELL MEA/SINGLE CELL TESTING

DUT	PEM ELECTROLYZER MEA					PEM ELECTROLYZER SINGLE CELL
Model	ELZ500W	ELZ500WN	ELZ500W4C	ELZ500W4CN	ELZ1	ELZ10
Min Power/kW	0.05	0.05	0.05	0.05	0.1	1
Max Power/kW	0.5	0.5	0.5	0.5	1	10
H ₂ Flow/NLPM	1.5	1.5	1.5*4	1.5*4	3	30
Air Flow/NLPM	0.75	0.75	0.75*4	0.75*4	1.5	15
Coolant/LPM	1.0	1.0	1.0*4	1.0*4	2.0	6
Current/A	200	200	200	200	200	400
Stack Temp/°C	90	90	90	90	90	90
Gas Pressure/Barg	50	3	50	3	50	50
Cell#	4	4	4	4	8	10

DUT	PEM FUEL CELL MEA		PEM FUEL CELL SINGLE CELL		
Model	PM100W	PM100WH	PM500WL	PM500W	PM2
Min Power/kW	0.005	0.005	0.025	0.025	0.1
Max Power/kW	0.1	0.1	0.5	0.5	2
H ₂ Flow/NLPM	1.5	2	15	20	50
Air Flow/NLPM	2.5	5	32	40	120
Inlet DP/°C	90	90	90	90	90
Gas Temp/°C	100	100	100	100	100
Coolant/LPM			1.5	2	5
Current/A	120	150	750	750	1000
Cell#	1	1	4	4	10
Stack Temp/°C	90	90	90	90	90
Gas Pressure/kPag	300	300	300	300	300

ORIGIN-E PEM ELECTROLYZER CELL HARDWARE

APPLICATION

- Lab experiment and teaching
- Lab analytic instrument
- Hydrogen supply for fuel cell
- Redundant renewable energy transformation and storage



GDL/PTL MATERIAL TESTER

FEATURES

- Surface stress control
- Sample thickness measurement to 1µm accuracy
- Contact resistance test (µohm)
- Resistivity test (vertical/plane direction)
- Permeability test (vertical/plane direction) (Darcy, Gurley Sec)
- Sample non-parallel compensation

