



# EVALUATOR C50-LT

PEM Single Cell Testing



- For R&D on MEAs, GDLs, electrodes, gaskets, bipolar plates or catalysts
- Single cells and short stacks up to 500 W power range
- Compact plug and play system with ergonomic footprint
- Fully automated for safe, reliable and unattended operation in hydrogen safe area
- Maximum performance and safety via integrated PLC



EMISSIONS



ELECTRIFICATION



CAV



DATA

# EVALUATOR C50-LT

The Evaluator C50-LT offers outstanding performance of HORIBA FuelCon's Evaluator C and S series in a clever package design. The system contains all the necessary features for cell testing including humidification, electronic flow control, temperature and pressure control, nitrogen purge and electronic load management.

Combined with HORIBA FuelCon's sophisticated TestWork software, this system operates using either hydrogen or reformat fuels and is ideally designed for MEA developers, universities conducting fuel cell research, or stack developers performing initial single cell or short stack testing.

The integration of several devices from our TrueData line of diagnostic products such as our impedance analyzer, cyclic voltammetry or current density distribution analyzer allows operators to perform detailed studies of material behavior under real application conditions up to operating temperatures of 130 °C.

GENERAL FACTS	
STANDARD ANODE FLOW RANGE [NL/MIN]	0.05 to 5
STANDARD CATHODE FLOW RANGE [NL/MIN]	0.20 to 20
FOOTPRINT L X W X H, [METER] (INCHES)	1.1 x 0.8 x 1.9 (43" x 32" x 75")
STANDARD GAS TEMPERATURE	130 °C (266 °F)
HUMIDITY RANGE [HR]	Dry (by-pass) to 100 % at 90 °C (194 °F)
BACK PRESSURE CONTROL RANGE [BARA]	1.1 to 4.0
ELECTRONIC LOAD	Up to 200 A, 2.5 V, 6 V; 500 W zero voltage option
ACTIVE TEST ITEM THERMO SETTING	Receptacles for temperature sensor, cell end plate heater and cooling blower, PID control loop
SAFETY FEATURES	PLC controlled 3-level alarming system, programmable nitrogen purge, emergency stop
DATA LOGGING	SQL data base

## OPTIONS

Reformat simulation  
TrueData-EIS (impedance analysis)  
TrueData-CYV (cyclic voltammetry)

## 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



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