



## SINGLE CELL & SHORT STACK TESTING

- For R&D on MEAs, GDLs, electrodes, gaskets, bipolar plates or catalysts
- For single cells and short stacks up to 1,000 W power range
- Up to 500 A current
- Extended safety features including LEL hydrogen detector and cabin ventilation
- Fully automated for safe, reliable and unattended operation in hydrogen safe area
- Advanced pre and back pressure control functions
- Maximum performance and safety via integrated PLC

**HORIBA**FuelCon

Evaluator C500-LT



## GENERAL FACTS

Standard anode flow range [Nl/min]	0.2 to 20
Standard cathode flow range [Nl/min]	0.5 to 50
Footprint L x W x H, [meter] (inches)	1.8 x 1.2 x 2.0 (71" x 47" x 79")
Standard gas temperature	130 °C (266 °F)
Humidity range [HR]	Precise, saturator type technology Dry (by-pass) to 100 % @ 90 °C (194 °F)
Back pressure control range [bara]	1.1 to 5.0
Electronic load	Up to 500 A autoranging 2.5 V, 35 V; 1,000 W zero voltage option
CVM (Cell Voltage Monitoring)	CVMpro-G4 MCM-IntelliProbe-U10 (SMART Testsolutions) -1 to 5 V or -3 to 3 V; accuracy ± 0,1 % up to 10 channels
Active test item thermo setting	Receptacles for temperature sensor, heater and cooling blower; PID control loop
Safety features	PLC controlled 3-level alarming system, programmable nitrogen purge, emergency stop, hydrogen LEL-detector
Data logging	SQL data base

The Evaluator C500-LT is tailored to the needs of complex single cell and short stack testing or evaluation. 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.

The C500-LT is perfectly designed for dynamic simulation of mobile applications in order to study fuel cell system behavior and optimize system design. The station is based on the established C1000-LT platform, but in a cost-optimized design and requires no external cooling water supply in standard specification.

Please feel free to download the latest information available at [www.horiba-fuelcon.com](http://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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## OPTIONS

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

## 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