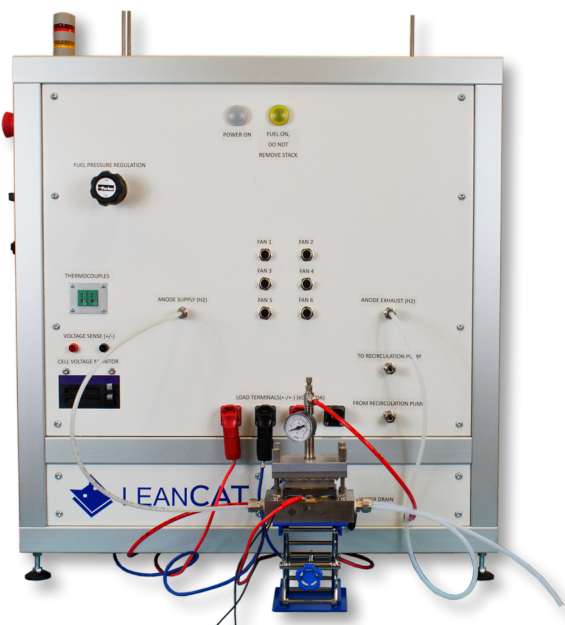


Fuel Cell Test Station PBT



LEANCAT
FUEL CELL TECHNOLOGY



Key features

- Suitable for low-temperature **PEM fuel cells**
- Available configurations for testing single cells with active area up to **25 cm²** or **50 cm²**
- Current range **up to 120 A**
- Optional potentiostat with **integrated EIS**
- Safety features for **fully-automated** operation
- CE certificate of conformity

Gas supply specification

	Value
MFC anode gas flow (fuel)	0.04 - 2 slpm
MFC cathode gas flow (oxidant)	0.1 - 5 slpm
MFC additional gas flow (CO, ...)	optional
N ₂ purge	automatic

Pressure control and measurement

Backpressure controller	up to 3 bar
Cell inlet pressure sensor	anode and cathode
Pressure sensors at gas inlets	

Humidification

Humidifiers	micro-bubbling system
Dew-point range	up to 90 °C
Humidifier by-pass	automatic control
Water reservoir refilling	automatic with low water level warning
Over-temperature shutdown	programmable

Load bank options

	Value
Electronic load with zero-volt supply	60 V 60 A (max. 25 cm ² cells)
Potentiostat with EIS	60 V 120 A (max. 50 cm ² cells) ±5 V ±20 A (max. 5 cm ² cells) ±5 V ±100 A (max. 50 cm ² cells)

Cell connectivity

Inlet hoses	heated & thermally insulated
Gas pre-heating	up to 90 °C
Cell heater power supply	2x 24 V
Cell temperature monitoring	3x thermocouple interface
Cell temperature control	integrated PID
Pressurized-air output for testing cell	manually regulated

Software control and security

Process control	industrial PLC
Data logging	SQL database
Client SW for Windows	

Safety systems

Features	safety shutdown with N ₂ purging emergency stop button hydrogen sensors (1 inside and 1 ambient) alarm system and history
Closed exhaust system	incl. water separator

Dimensions and weight

Design	bench-top
Size (W x D x H)	700 x 900 x 1130 mm
Weight	100 kg

Accessories: AirCell (air-pressed test cell)

Variants	1 cm ² , 5 cm ² , 25 cm ² , or 50 cm ²
Base from anodized aluminum	with electric or water heating
Current collectors	gold-coated
Graphite end plates (optional)	serpentine flow field



AirCell



LEANCAT s.r.o.
U Pergamenky 1145/12
170 00 Prague, Czech Republic
info@lean-cat.com
www.lean-cat.com



TS100W