

PEMFC testing station Makrét serie





Purpose

Desktop version of PEMFC Testing station of power range up to 100 W. It designed to meet requirements of our customer with low budget. System is also of high quality providing good flexibility to our customer but there is not integrated more optional systems as in our higher Hermés series. This system is suitable also for education due to its installed analog sensors in front frame.

Fully automated and unattended operation

All functions of testing station are controlled by computer and it is ready for remote control: especially all valves, heaters, mass flow control, pressure control, humidity control. System is fully automated enables unattended operation.

Capabilities

Two lines of gases fully humidified and integrated, enable to perform all basic fuel cell experiment as well as all basic electrochemical experiment. Humidification system is automatically refiled. Flux of nitrogen can be used and controlled in both lines.

Safety

System contains safety procedures as nitrogen purge and emergency shut down. Working range as voltage and current of the cell, all temperature sensors are compared with safety limits that can be set. Hydrogen leak sensor is installed.

unattended operation.	
Markét series	
Power range	100 W , Scalable up to 100 W
Flow rates	Anode: from 100 sccm to 2 slmp, Cathode: 500 sccm to 5 slpm
Gas humidification	2 lines, Dew point up to 90°C, dry gas by-pass (manual or automatic)
Operating temperature	Max 120°C (Cell temperature)
Operating pressure	3 Bar
Loads	Different variants up to 100 A
Potentiostat*	Different variants from 5V/20A to 10V/100A. Optional and
	external
Safety	Automatic nitrogen purge, voltage and current limits, hydrogen
	detector
Dimensions	Desktop size 450x600x500 mm
Cell or Stack connectivity	
Heaters	Provision of two independent heaters 110-230 V controlled by
	PID with TC disconnect protection.
Sensors	Two extra AIO channels
Compressed air	Up to 10 Bar with manual safety regulator.
Voltage senses	Ready for 4 points measurement for single cell or Multichannel voltage measurement for stack
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Detailed specification and price quotation on request.



