

# **PEMFC testing station Apollon series**





### **Purpose**

Apollon series is PEMFC testing station designed to meet power range from 4 kW to 10 kW. It is suitable for testing single cell of large area as well as for experimenting with fuel cell stack at defined working condition of middle range power.

## 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**

Costume designed lines are provided. Anode and cathode lines are humidified by advanced system. Provided with multi voltage monitor, multitemperature monitor for fuel cell stack analyses, cooling system 4 - 10 kW / 95°C or 190°C., EL load and/or potentiostat.

### 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. There are two levels of limits. Hydrogen leak sensor is installed.

Apollon series	
Power range	4 kW – 10 kW
Flow rates	Anode: 100-200 slpm, Cathode: to 250-800 slpm
Gas humidification	Dew point up to 90°C, dry gas by-pass (manual or automatic)
Operating temperature	Max 120°C / 190°C; 4 Bar
Cooling system	Cooling system up to 4-10 kW 95°C/200°C
Loads	Different variants meet the power range.
Potentiostat	Different variants from 5V/20A to 10V/100A
Safety	Automatic nitrogen purge, voltage and current limits, hydrogen
	detector, safety interlocks, blackout protection.
Dimensions	1200x1200x1800 mm
Cell or Stack connectivity	
Heaters / Cooling	Provision of two independent heaters 110-230 V controlled by
	PID with TC disconnect protection. Coolant connection.
Compressed air	Up to 15 Bar with manual safety regulator.
Voltage and TC senses	Ready for 4 points measurement for single cell or multichannel
	voltage and temperature measurement for stack

Specification on detail and price quotation on request.



