



## DL-ZRL081 Fuel Cell Teaching Experiment Platform

### ■ Overview

- Proton exchange membrane fuel cell is a kind of electrochemical reaction which regard hydrogen fuel as reducing agent and oxygen as an oxidizing agent, and it is an efficiently generation device which directly turn chemical energy into electrical energy power (the chemical reaction is  $H_2 + 1/2O_2 = H_2O$ ). The fuel cell can be the power source of power station or vehicle.

Compared with the internal combustion engine, the most prominent advantage is high energy conversion efficiency and low environmental pollution.

- The system consists of self-priming PEM fuel cell stack, metal hydride hydrogen bottle and fuel cell controller and DC linear load, AC linear load, DC inductive load and test instrumentation.

■ Technical Parameter

- DC/DC power module (9V) Instrument power supply
- DC/DC power module (12V) Convert output fluctuations DC current of the fuel cell to 12V DC
- Fuel cell controller control the fuel cell fan speed and timing exhaust