



Email : [sales@laboratoryinstrumentindia.com](mailto:sales@laboratoryinstrumentindia.com)

**Product Name :**  
Educational Proton Exchange Membrane fuel cell

**Product Code :**  
LBNY-0005-18400039



**Description :**

Proton Exchange Membrane Fuel Cell incorporates a unique membrane electrode assembly for the stack cells, each of which is internally reinforced and water cooled. The Proton Exchange Membrane fuel cell is one of the current leading contenders as a power source for use in motor vehicles. The fuel cell generates electrical power directly from hydrogen and air producing only pure water and heat as a by-product. This gives the cell a high watt density and allows students to investigate a practical fuel cell with a realistic output capable of driving significant electrical loads up to 0.75kW. Unlike other educational units on the market the Proton Exchange Membrane Fuel Cell utilises an award winning module that is identical to those used in an actual vehicle power supply currently in production.

**Technical Specification :**

**Experimental Capabilities:**

Measurement of power density from a fuel cell capable of up to 750W (1 HP) electrical output.  
Measurement and investigation of reactant utilization and transport phenomena.  
Measurement and investigation of fuel cell efficiency with reference to fuel and air consumption, power output and heat losses.  
Measurement and display of key temperatures and fluid throughputs fuel stoichiometric and cooling circuits.  
Measurement of the current density and voltage-current characteristics of a fuel cell.

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# Laboratory Instrument India

