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Product Name :
Fuel Cell Electric Vehicle Training System

Product Code :
LBNY-0002-620056



Description :

Fuel Cell Electric Vehicle Training System

Technical Specification :

A Fuel Cell Electric Vehicle is a hydrogen vehicle which produces electricity to power. Its on-board electric motor uses hydrogen fuel cell. It provides an effective solution saving natural resource and alleviating environmental pollution. In the progress of fuel cell technology, the importance of the topics such as how to use fuel cell in an electric vehicle system and how to integrate fuel cell control with other subsystems has been enhanced.

Fuel Cell Electric Vehicle Training System is designed to demonstrate the application of fuel cells onto electric vehicles, including the FCEV mechanism, fuel cell system, hydrogen supply system, and motor controller.

Features

The Training System can be emulated as:

Direct Hydrogen Fuel Cell Vehicle

Battery Electric Vehicle

Hybrid FCEV

The Lithium-ion Battery can also be charged by external electric supply.

Connectable to PC via USB, Software for Data Acquisition from Meters embedded in the system

High energy efficiency and long driving range: With complementary discharging characteristics of hydrogen fuel cell and lithium-ion battery, the efficiency of entire system is enhanced.

Real-time vehicle information display : While the FCEV is running, the information of voltage, current, speed and temperature can be displayed on the instrument panel.

Offering fundamental knowledge of hydrogen fuel cells, hydrogen supply, hydrogen storage and system safety.

Specifications:

Water storage
Metal hydride canister
Temperature feedback fans
DC to DC Converter
Meter display
Battery (24V/10Ah)
Motor controller (optional)
Load unit
Wheel motor
Acceleration and resistance device
System control panel
Drawer
Fuel Cell stack (consumable) and controller

List of Experiments:

Introduction of fuel cell electric vehicle
Introduction
Electric vehicle battery
Electric vehicle drive device
Battery electric vehicles
Fuel cell electric vehicles
Momentum of pure electric vehicles
The fuel cell activation
The voltage-current characteristic curve of the fuel cell with /without SCU
The impact of the fuel cell operating pressure
Direct fuel cell vehicles
Series hybrid fuel cell electric vehicles.



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