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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.



Laboratory Instrument India