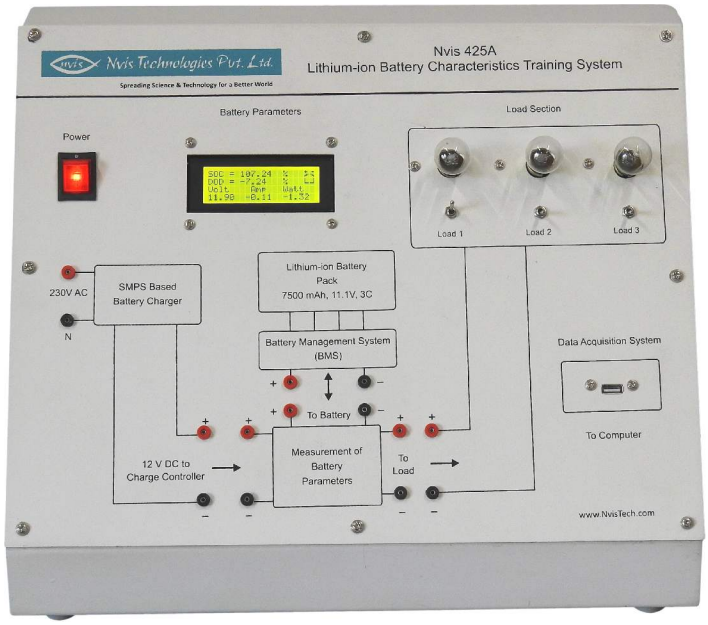
Battery Characteristics Training Solutions

Nvis 425 Series



Designed for Electrical, Solar and EV Labs

Energy storage is becoming increasingly important for improving the efficiency, reliability and price-competitiveness of power utilities and electric vehicles, and to achieve deeper integration with intermittent renewable energies.

Battery is an energy storage device consisting of two or more electrochemical cells that convert stored chemical energy into electrical energy and used as a source of power. As an energy storage device, the use of the battery is increasing day by day such as in automobiles, inverter , UPS, off- grid renewable energy sources.

Nvis 425 Series Battery Characteristics Training Solutions introduce students to the operation of various batteries. Hands-on experiments cover the charging and discharging characteristics of lead-acid, Li-ion, Lithium-ion phosphate, and Lithium Polymer batteries.

Features

- Series for study of battery characteristics of Lead-acid, Li-ion, Lithium-ion phosphate, and Lithium Polymer batteries.
- In built battery in the system.
- Real time and interactive training setup.
- DC Power source and charge controller.
- LCD Meter and battery level indicator for analysis.
- Designed with all safety standards.
- PC Interface for real time curve plotting using built-in DAQ.
- Provided with cascaded DC load bank.

Battery Characteristics Training Solutions

Nvis 425 Series

Scope of Learning

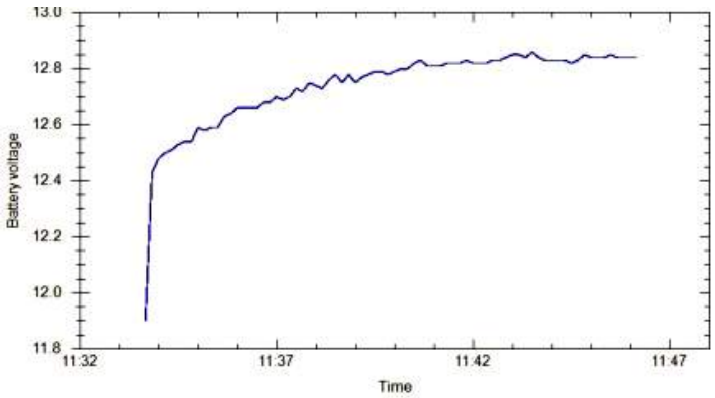
- To understand the overall functioning of Lead-acid, Li-ion, Lithium-ion phosphate, and Lithium Polymer batteries.
- To study the charging and discharging characteristics of Lead-acid, Li-ion, Lithium-ion phosphate, and Lithium Polymer batteries with meters and by using built in DAQ.

Technical Specifications

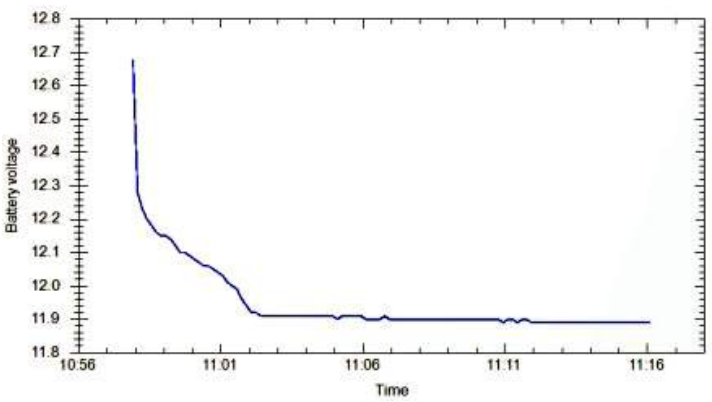
Parameters	Lead-Acid battery	Li-ion battery	Lithium Iron Phosphate (LiFePO4) battery	Lithium polymer (Lipo) battery
Model	Nvis 425	Nvis 425A	Nvis 425D	Nvis 425E
Voltage	12V	12V	12.8V	11.1V
Capacity	7Ah	7.8Ah	9.0Ah/ 6.0Ah	2.2Ah
Charge controller	PWM based	PWM based	PWM based	PWM based
Battery level indicator	LCD display	LCD display	LCD display	LCD display
Load	12V, 4 Amp approx.	12V, 4 Amp approx.	12V, 4 Amp approx.	12V, 4 Amp approx.

Laptop (optional)

Charging characteristics



Discharging characteristics



Subject to change - Version 2.0

Designed & Manufactured in India by

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