



Battery Management System Trainer is an electronic system which manages a battery or a pack of cells. It monitors and controls battery critical parameters, estimate its state, balancing and make sure that they operate in recommended safe conditions. A battery plays a key role in the fields of military, transportation, communication especially in portable devices like mobile phones, electric vehicles and appliances. The rechargeable electric battery is the most common and widespread device used to store electro-chemical energy for power systems. BMS is defined as which manages, control and monitor the conditions of battery.

Features

- Temperature measurement
- Cell balancing
- Voltage measurement
- Current measurement
- Motor Assembly Mechanical Arrangement for Experiments

Experiments

- Study of Battery Management System.
- Study of Battery Charging using Battery Management System.
- Study of Battery Discharging using Battery Management System.
- Study of Cell Balancing
- Study of Battery Management System including charging, discharging and cell balancing phenomenon.

Technical Specifications

Battery Cell (6nos)

Type	:	LiFePo4
Cell Voltage	:	3.3V to 4V
Connection Type	:	Series
Machine Type	:	BLDC Motor
Voltage Rating	:	24V/110W Approx.
Speed	:	3000 rpm \pm 10%
BLDC Motor Controller (inside of Trainer)	:	1nos.
Digital RPM Meter (0-9999 Count)	:	1nos.
Motor Speed Control	:	PWM
Loading arrangement	:	Mechanical
Brake Drum/Pulley	:	Aluminum casted
Power supply	:	24VDC.

Meters

DC Voltmeter	:	0-300V
DC Ammeter	:	0-10A
Spring Balance	:	2nos.
Mains Supply	:	Single Phase, 230V \pm 10%, 50Hz
Interconnection	:	4mm Patch cord
Digital Battery Level Indicator	:	1 nos. (On LCD)

Accessories

- Operating Manual-1nos.
- Patch Cord-10 nos.
- Wall poster with attractive study content - 2Qty.

Note: Specifications are subject to change.