

Premier DC Machine Lab-I is an adaptable training system for Electrical laboratories. It can be aptly employed for understanding the basic concepts and functioning of DC Motors and Generators. The product provides hands-on experiments like Speed control, Torque-Load Characteristics, N-V Characteristics, N-I Characteristics etc. The trainer thus provides explicit understanding of the subject



### Technical Specifications

#### DC Power Supply

Fixed	: 200 V
Variable	: 0 - 200 V (Please refer specs on motor)

#### DC Machines

Type	: DC Shunt
Rating	: ½ HP (Also available with 1, 2 & 3 HP)
RPM	: 1500 (No Load)

#### Meters used

Voltmeter (MC)	: 300 V (2 Nos.)
Ammeter (MC)	: 1 A (2 Nos.)
Ammeter (MC)	: 5 A (2 Nos.)

**Tachometer** : 20,000 RPM

**Dimensions (mm):** W 600 X D 450 X H 600 (Panel)  
W 250 X D 800 X H 300 (MG Set)

### Features

- ▶ Electrical Loading arrangement upto 1.2 KW
- ▶ Shaft Coupling arrangement
- ▶ Exclusive and rugged designed panel
- ▶ Stand alone operation
- ▶ Provided with digital Tachometer
- ▶ Designed by considering all the safety precautions
- ▶ High quality meters
- ▶ Diagrammatic representation for the ease of connections

### Scope of Learning

- Study of No Load Characteristics (OCC) of DC Shunt Motor
- Study of Load Characteristics of separately excited DC Shunt Generator
- Study of Speed Control of DC Shunt Motor by field current control and armature voltage control methods
- Study of Load Characteristics of separately excited DC Shunt Motor
- Study of self excited DC Shunt Motor