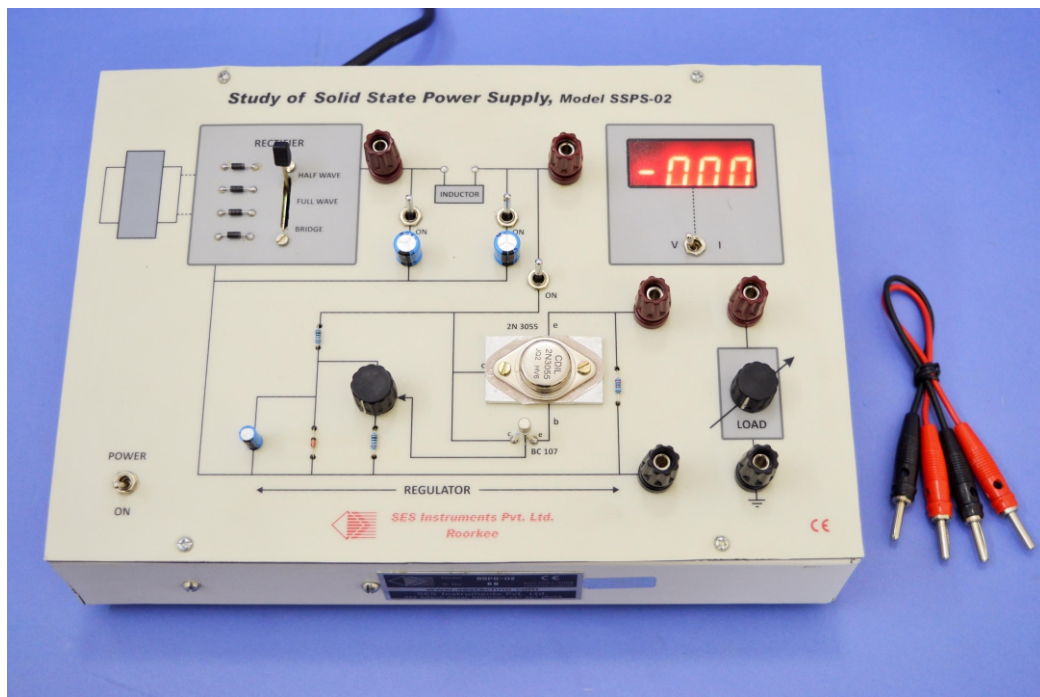


# SSPS-02

## Study of a Power Supply (Solid State)



### Features

1. Study of rectification
  - (a) Full wave rectification
  - (b) Half wave rectification
  - (c) Bridge rectification
2. Study of ac component (Ripples)
  - (a) Efficiency of various type of filters L,  $\pi$ , T type etc.
  - (b) The effect of load
  - (c) The effect of regulation
3. Regulation characteristics
  - (a) The effect of load on regulation
  - (b) The effect of change in main's voltage
4. Electronic Load  
To draw the load current smoothly

### Introduction

The Set-up consists of a step-down transformer, a rectifier circuit (can be used as a half-wave or a full-wave rectifier), a filter circuit (an inductance and two capacitors) - the arrangement can be used for the study of various configuration of filters and a regulator circuit. A built-in electronic load is used to smoothly vary the load current while a digital panel meter on the board measures the load current and load voltage.

### Specifications

|              |   |   |
|--------------|---|---|
| Output       | : | 0-12 volts                                    |
| Max. Current | : | 200 mA  |
| Regulation   | : | 1%  |
| Metering     | : | Output Voltage/ Current on the switchable DPM |



The experimental set-up is complete in all respect, except a Multimeter and a CRO