



## REGULATED DC POWER SUPPLIES

### Description

Regulated power supplies are ideally suitable and simple to use power source for students and professionals for their experiments in electric and electronic circuits. These power supplies are safe to use, rugged in construction reliable and easy in operation. Single, Dual, Triple and Multi output power supplies are designed specially to meet the requirements of industrial educational laboratory applications with high regulation, stability, low noise and ripple with either digital or analog displays. Each variable output operates in constant voltage (CV) or constant current (CC) mode and protected from overload and short circuit and all power supplies are provided adequate externally serviceable fuse and internal thermal fuse for transformer to enhance the safety level of users as well as the instruments. These power supplies comply all international safety standards.

### Specifications

**Voltage & current display**  
 Digital (LCD/LED) Analogue meter optional  
 2 meters for volt & current for Single Channel  
 4 meters for Dual / Triple / Multi Channels  
**Fixed output** : 5V @ 5Amps max.  
**Ripple & noise** : <2mV  
**Output current** : Max rated current with over load (red LED) indication.

### Models

**Single Channel** : 0 to rated voltage & current  
**Single Channel+** : 0 to rated voltage & current with one fixed output and a  $\pm$  power out  
**Dual Channel** : Two independent output of '0' to rated voltage & current  
**Dual Channel+** : Two independent output of '0' to rated voltage & current with one fixed output and a  $\pm$  power out  
**Triple Channel** : Two independent output of (Master & Slave)+1 '0' to rated voltage & current with one fixed output  
**Multi Channel** : 2 independent & 2 or more (Master & Slave)++ fixed output/  $\pm$  power out

### Operation modes

**1) CV mode** : Output range 0 to rated Volt continuously adjustable  
**Line Regulation** : <0.01 %  $\pm$ 2mV for 10% change in line.  
**Load Regulation** : <0.01%  $\pm$ 2mV for load vary from zero to full load  
**Ripple & noise** : <1mV rms max.  
**Indication** : CV mode GREEN LED

**2). CC mode** : Output range 0 to rated current continuously adjustable  
**Line Regulation** : <0.1%  $\pm$ 250 $\mu$ A for  $\pm$  10% change in line  
**Load Regulation** : <0.1%  $\pm$ 250 $\mu$ A for change in output volt from 0 to max.  
**Ripple & noise** : <0.05%rms  
**Indication** : CC mode RED LED

### Tracking Mode

Tracking operation : For Dual, Triple & Multi outs  
**1) Independent** : Output varies from 0 to rated voltage & current  
**2) Series** : Output varies from 0 to double the rated voltage at rated current  
**3) Parallel** : Output varies from 0 to double the rated current at rated voltage

**Tracking Error** :  $\leq$ 0.5% +10mV of the Master  
**Series Regulation** :  $\leq$ 300mV

**Protections** : Automatic Overload and Short circuit protection.

Thermal protection is also provided by cooling fans(only or Dual Triple & Multi output Power Supplies

**Input voltage** : AC 230 V  $\pm$  10%, 50Hz Single phase (110 VAC (optional)

### Other Power Supplies

- Single, Dual and Triple output Programmable Power Supplies
- Power Supplies with PC interface
- Custom Built Power Supplies

### Features

Compact & elegant designs  
 High load & line resolution  
 Plastic moulded front panels  
 Infinite Short circuit & overload protection  
 Full control over Voltage & Current on MASTER output Terminals & Displays(optional Models)

We pursue a policy of continuous development & product improvements, thus the specification in this document & view of the front panel may change without notice