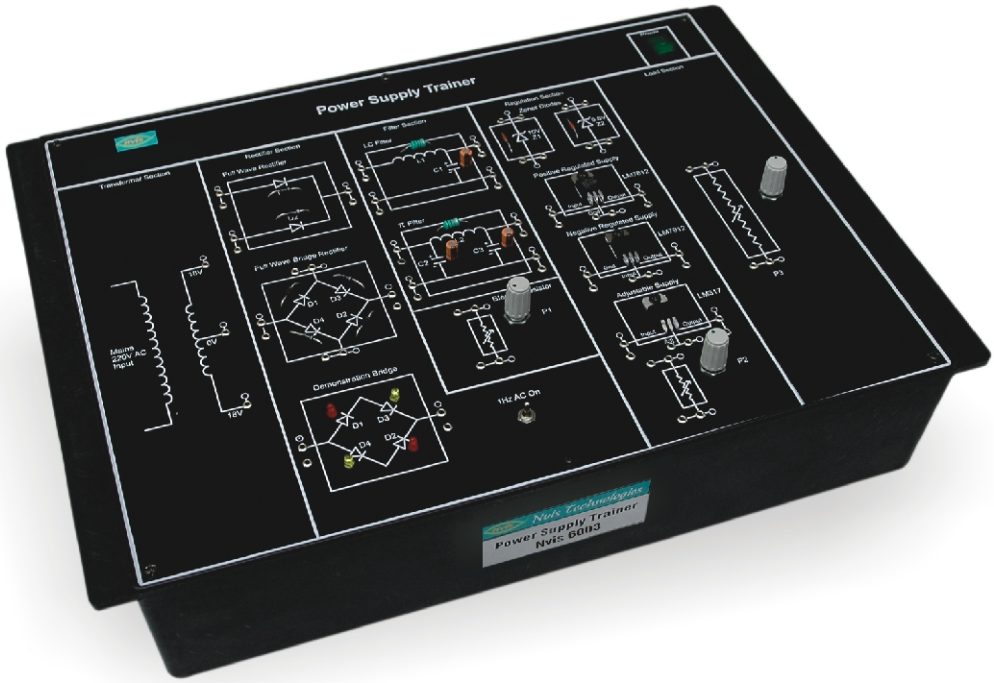
Power Supply Trainer

Nvis 6003



Nvis 6003 Power Supply Trainer is a comprehensive training system for the laboratories. It is useful in understanding the various concepts of a DC Power Supply.

As we know that power supply is a very basic element of any electronic circuit or appliance. Starting from a mobile charger to a huge Computer system, each needs an efficient Power Supply. It is essential for an engineer to know basic concepts of Electronic Power Supplies.

This trainer describes the Transformer, Rectifiers, Filters, Regulators, Role of Bleeder resistor, Load and Line regulation etc. While performing any experiment students have to connect the links by patch cords so it is very helpful for students to learn the inputs and outputs of different sections of any Power Supply circuit. It also consists of a demonstration bridge which is made up of LEDs for visualization of each part of an AC cycle.

Features

- **Real time appearance of components**
- **Test points are provided in different sections of Power Supply**
- **Demonstration bridge**
- **Designed by considering all the safety standards**
- **Provided with a detailed Operating manual**
- **Low cost yet including many experiments**
- **Online product tutorial**

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Scope of Learning

- Study of Transformers and its working
- Study of Two diode Full Wave Rectifier
- Study of Full Wave Bridge Rectifier
- Study of Demonstration Bridge
- Study of Ripple Factor and to calculate Ripple Factor of Half Wave, Full Wave and Bridge Rectifier
- Study of LC and π filter
- Study of Bleeder Resistor and its effect on load current
- Study of Zener Diode as Regulator
- Study of Positive Regulated Supply
- Study of Negative Regulated Supply
- Study of Adjustable Regulated Supply
- Study of Line Regulation
- Study of Load Regulation

Technical Specifications

Outputs

Zener diodes	: 10V, 5.6V
Regulators	: +12V regulated
	-12V regulated
	1.8 to 17V adjustable
Load	: 5kW variable with 1kW fixed resistance
Bleeder Resistor	: 5kW variable with 1kW fixed resistance
Astable Multivibrator	: 1Hz, 14Vpp
Transformer	: Primary 0 to 220V
	Secondary 18-0-18, 6-0-6 (500mA)
Fuse	: 500mA (slow blow, spare fuse is given in mains socket)
Mains Supply	: 230V ±10%, 50Hz
Dimensions (mm)	: W 365 x D 260 x H 120
Weight	: 2kg (approximate)

Optional

Oscilloscope 'Scientech 801'

Multimeter 'Scientech 50/51'

Subject to change - Version 2.0

Designed and Manufactured in India by -

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