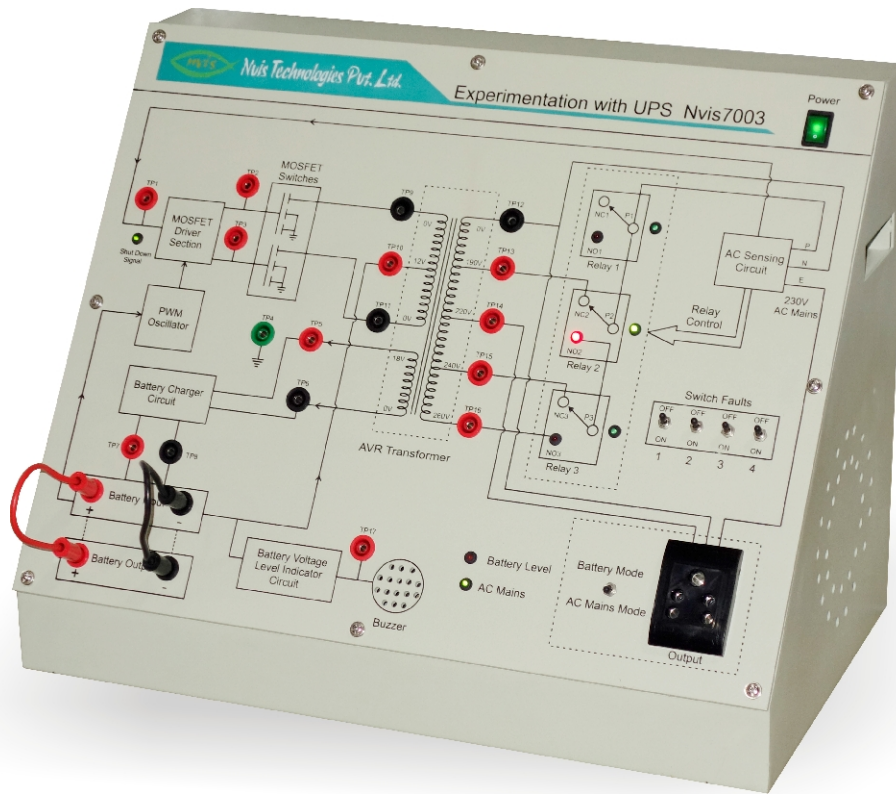




Experimentation with UPS

Nvis 7003



Nvis 7003 Experimentation with UPS is a very versatile training system, has been designed to explain a very interesting and frequently used switching based power supply-The UPS (Uninterrupted Power Supply).

When electrical utility power fails or drops to an unacceptable level, UPS are key in saving and protecting valuable computer data. UPS equipment provides power conditioning, power mains regulation and, in case of power outages, provides the crucial backup power needed for an orderly shutdown of computer processes and files. UPS are also used for emergency power supplies for Hospitals, data centers, municipalities, industrial and commercial centers to supply power in case of power failure from main supply authority.

Features

- In depth explanation of PWM switching technology, which is one of the most important feature of UPS
- A Low cost product demonstrating all basic concept of UPS
- Various test point are provided so that one can easily measure the voltages of different sections
- Designed considering all safety standards
- Online product tutorial



Scope of Learning

- Study of PWM Technology
- To understand the overall functioning of UPS Trainer
- Study of AVR transformer section of UPS
- To study the UPS circuit in load condition
- To identify different faults and to study the systematic procedure of their troubleshooting in UPS circuit

Technical Specifications

Input Voltage : 190 to 260V AC $\pm 10\%$, 50Hz
(Single Phase)

Output Voltage : 230V AC, $\pm 10\%$

Transformer

Input : 12-0-12V AC

Outputs : 0, 190, 220, 240, 260V AC
18 - 0V AC for battery charging

Battery

Rating : 12V DC / 7.5 AH

Type : SMF Rechargeable Battery

Technology : MOSFET-PWM

Output Power Capacity : 500VA

Dimensions (mm) : W 365 x D 260 x H 120

Weight : 5kg (approximate)

Optional

Oscilloscope 'Caddo 801'

Multimeter 'Caddo 50/51'