



The UPS trainer 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).

The product is designed keeping in mind that a student can understand each block of UPS in a very easy way. Various test points have been provided so that one can check inputs and outputs of each block contained. Being different from a conventional block diagram internal structure of blocks is also shown. AVR (Automatic Voltage Regulator) is presented in such a way that a student can readily understand its functioning and pin configuration.

Since UPS is different from an inverter because its switching changeover time is less than 3 mS which is very less so a computer system doesn't get reboot.

Technical Specifications

190 to 260 V 10%, 50 Hz Input

Output : 230 V

Transformer specifications

: 12-0-12 V Input

 $: \ 0,190,220,240,260\,\mathrm{V}$ Outputs

18 - 0 for battery charging

- In depth explanation of PWM switching technology, which is one of the most important feature of UPS
- A Low cost product demonstrating all basic concepts of UPS
- Various test points are provided so that one can easily measures the voltages of different sections
- Designed considering all safety standards
- Provided with a detailed Operating manual

Experiments than can be performed

- 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

Note: Specifications are subject to change.