



The Inverter trainer is a versatile training System for Laboratories. It is designed such that all the basics of Inverter can be easily understood. This training system provides understanding about conversion of DC into AC by PWM Technique. Different blocks are explained like charging of battery, DC to AC conversion, AC mains sensing circuit, etc. also provided with fault switches to develop the troubleshooting practice.

Technical Specifications:

Rated Power : 60 Watt**Power Supply** : $230 \text{ V} \pm 10\%$,

 $single\,phase, 50\,Hz$

Charging Transformer : Step down type,

Input voltage: 230 V

Output voltage: 16 V

Inverter Transformer : Step up type

Input voltage: 0-12 V Output voltage: 230 V

 $\textbf{Inverter output voltage} \hspace{1.5cm} : \hspace{.2cm} 230 \hspace{.05cm} V \hspace{-.2cm} \pm \hspace{-.2cm} 10\%$

50 Hz ±5%

Inverter voltage control : By PWM technique

Battery : 12 V DC /7.5 Ah /12

Hours

: 1A

Relay : 2 Pole/12 V/285 W

LED Indicators : Inverter ON, mains ON,

charging ON

 $Fuse for inverter \, protection \,$

(on Trainer board)

Mains Fuse : 1A

- PWM Inverter Technology
- Stand alone operation
- Compact design
- Self explained layout
- Provided with Rechargeable battery
- On board LED indication for mains, charging, inversion etc.
- Insulated sleeves on test points for safety

Experiments that can be performed

- To understand the function of Inverter Trainer
- To understand the function of Inverter in presence of main supply and understand the charging of battery
- To understand the working of Relay
- To study the AC Mains sensing circuit of Inverter
- To study the Inverter circuit
- To study the different faults and there troubleshooting in Inverter circuit

Note: Specifications are subject to change.