# db-tech

## **UPS TRAINER**

### **GENERAL DESCRIPTION**

The DB-5500 COMPUTER UPS TRAINERS is designed to instruct service technicians in the operation, theory. servicing, problem diagnosis and repair of the key devices & components used in Information Technology. The trainer is based upon computers and components which have been modified to facilitate training and have a special electronic fault insertion system. The unit consists of one drive that shows all key internal components and functions.



# **Specification**

#### FEATURES OF THE SYSTEM

- 1) Based on highly reliable microchip PIC micro® micro-controller.
- 2) MOSFET based power stage, with PWM AC output.
- 3) Mains to backup mode changeover time less than 9mSec.
- 4) Backup mode protected against overload, short circuit, reverse phase and unbalanced MOSFET drive.
- 5) Line synchronized change over from mains to backup and back.
- 6) Over current of MOSFET's protected within micro seconds.
- 7) Three step AVR with input range 140V to 280V AC. and output range 200-245V AC.
- 8) MOSFET based PWM battery charger.
- 9) Automatic low battery warning and cut off.

#### **TEST POINTS & OBSERVATION**

- 1) Input & output voltage, different
- transformer winding voltage.
- 2) AVR section and AVR operating relay.
- 3) Mains & battery voltage reference signal.
- 4) PWM signal
- 5) Output indicator & buzzer
- 6) Battery voltage

#### **INPUT POWER & OPERATION CONDITION**

AC 220V - 240V, 50/60Hz, 1-Phase 0°C to 45°C, 85% or Less (R.H.)

#### **Optional Accessories:**

Multi-meter
Auto transformer

#### **BLOCK & TROUBLESHOOTING**

- 1) Backup mode failure
- 2) Mains failure
- 3) Output failure
- 4) Battery failure
- 5) Buzzer failure
- 6) Mains indicator failure
- 7) Output indicator failure
- 8) INV. indicator failure
- 9) Battery reference voltage failure
- 10) Complete UPS circuit failure (backup & mains both mode failure)

#### Manuals:

- (1) All manuals are written in English(2) Teaching Manuals
- Notes

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- Specification is subject to change without notice.
  - All dimensions are in mm unless otherwise stated.