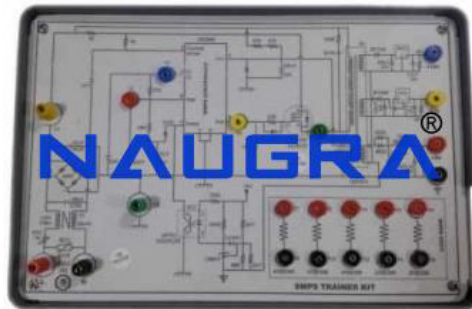


**Product Name :**  
SMPS Trainer Board

**Product Code :**  
NLAB-ELECTRONICSAB210004



**Description :**

SMPS Trainer Board

**Technical Specification :**

Trainer is a very versatile training system, has been designed to explain a switching based Switch Power Supply. The product is designed keeping in mind that a student can understand each block of SMPS 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. Switching Transformer is presented in such a way that a student can readily understand its functioning and pin configuration. Test points allow the analysis and monitoring of the signals in different sections. By using the fault simulation method, it is possible to introduce the most common breakdown and their rectification.

**Experiments That Can Be Performed:**

Study of Switching Transformer.

Study of PWM switching device.

Study of Optocoupler.

Study of Regulation.

Study of SMPS with Variac input (Optional)

Specifications:

Input : 80 to 230 V AC  $\tilde{\text{A}}$ ,  $\hat{\text{A}}\pm 10\%$ , 50 Hz

Outputs : +12 V DC regulated, -12 V DC regulated, +5 V DC regulated

Switching Transformer Input : 320 V DC switching at 132 KHz

Fuse : 2A

Load provided for testing the DC outputs

Variac Is also Provided as optional for Input Voltage

All interconnections are made using 2mm socket.

Test points are provided to analyze signals at various points.

Circuit Diagram provided on the front panel.

Bare board Tested Glass Epoxy SMOBC PCB with Block Diagram.

Attractive ABS Plastic Enclosure.

User Manual for Experiments

## Naugralabequipments

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