



Nvis 7002 Understanding SMPS has been designed specifically for the study of Switch Mode Power Supply. SMPS consists of a rectifier section, filter section, switching section and regulator section. Each section is explained separately and the internal structure of different blocks is also described. Switching transformer and chopper controller circuit are the main parts of SMPS. Switching Transformer works at high frequency, so it is also called as HFT i.e, High Frequency Transformer and the chopper controller is simply DC to DC controller. It gives constant output even when the AC mains is varied from 80V to 270V. Students can vary Voltage by using Variac.

Features

- Physical representation of Switching Transformer
- Various Test Points are provided to observe output
- Diagrammatical representation of each block
- Fault identification switches are also provided
- On-board protective shield to prevent shock
- Designed by considering all safety standards
- Online product tutorial

Scope of Learning

Study of:

- Primary rectifier and Filter section
- Switching Transformer
- Optocoupler
- Regulation
- SMPS with Variac input (Variable AC)-Regulation Test
- Various faults and procedure of their trouble shooting

Technical Specifications

Input	: 80 to 230V AC $\pm 10\%$, 50 / 60Hz
Output	: +12V DC regulated
	-12V DC regulated
	+5V DC regulated

Switching Transformer

Input	: 320V DC switching at 132kHz
Output	: 30V DC (approximate)

Fuse	: 500mA
-------------	---------

Dimension (mm)	: D 350 x W 280 x H 55
-----------------------	------------------------

Weight	: 1.3kg (approximate)
---------------	-----------------------

Included Accessories	: Attenuator Probe-1no.
	Mains cord-1no.
	Power Supply-1no.