



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



COIMBATORE-35

**Accredited by NBA-AICTE and Accredited by NAAC – UGC with A++ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

**COURSE NAME: 23EET101/BASIC ELECTRICAL AND
ELECTRONICS ENGINEERING**

I YEAR / I SEMESTER

Unit IV – ANALOG ELECTRONICS

Topic : Applications



APPLICATIONS

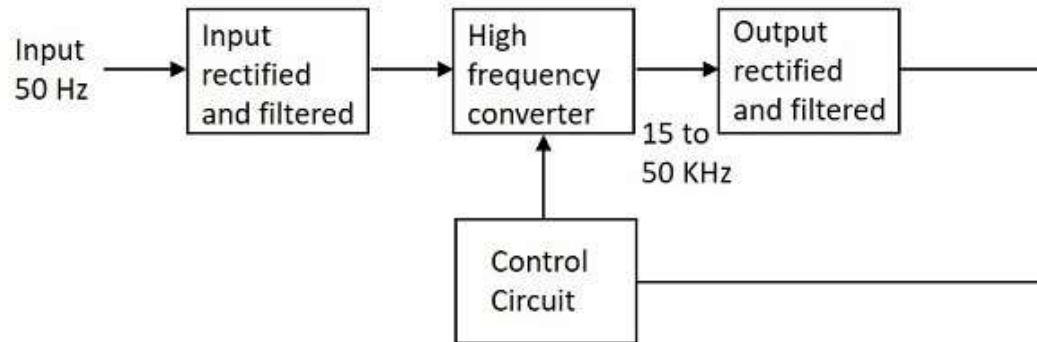


- Bridge Rectifier
- Voltage regulators
- UPS (UNINTERRUPTIBLE POWER SUPPLY)
- SMPS (SWITCHED MODE POWER SUPPLY)



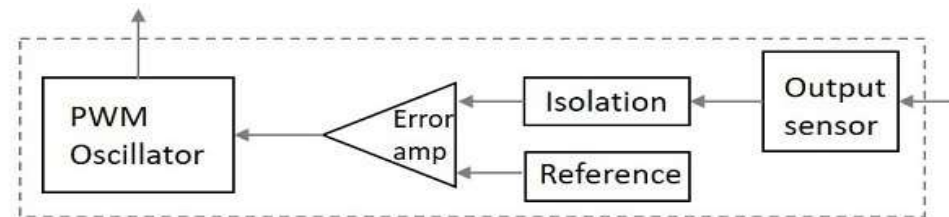
SMPS (Switched-Mode Power Supply)

- Electronic power supply that incorporates a switching regulator to convert electrical power efficiently.



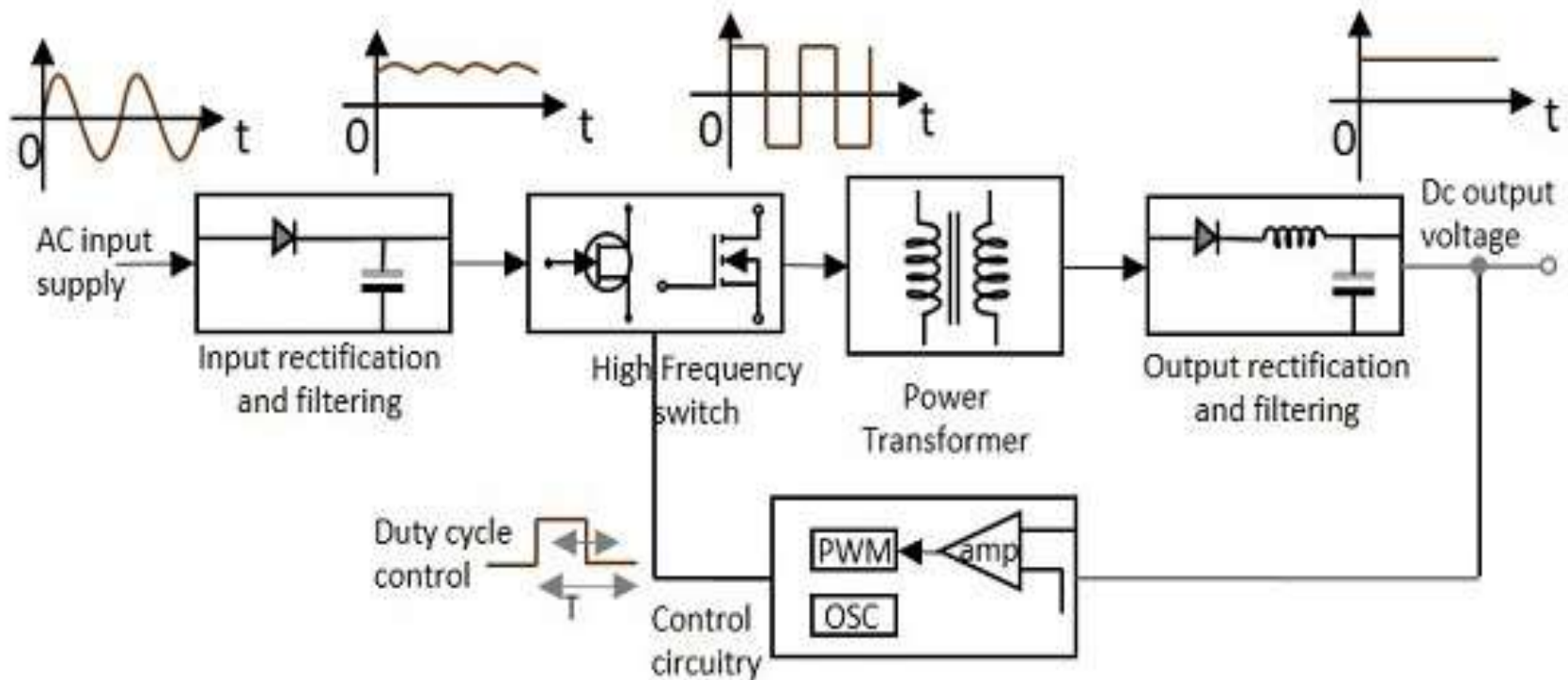
- Input Stage** - The AC input supply signal 50 Hz is given directly to the rectifier and filter circuit combination without using any transformer.
- Switching Section** - Power transistor or a MOSFET
- Output Stage** - to get the required DC voltage and regulated output voltage which is given to the feedback circuit.

- Control Unit**





BLOCK DIAGRAM OF SMPS



Functional block diagram of SMPS



*Thank
you!*