

Fault Detection in Transformer Using GSM Technology

<https://www.youtube.com/watch?v=bEEsN3upsuI>

The main aim of the project is to design a smart GSM and IoT based fault detection and location system was used to indicate and locate the exact spot where fault had occurred. It will provide a shorter response time for technical crew to rectify these faults and thus help to save transformers from damage and crash.

To design this project the current transformer, a voltage transformer, ESP8266 module, and a GSM modem are interfaced to Microcontroller. This system automatically finds faults, analyses and classifies these faults and then, calculates the fault distance from the control room using an impedance- based algorithm method. Definitely the fault information is transmitted to the control room. In conclusion, the time required to locate a fault is desperately reduced, as the system automatically and exactly provides accurate fault location information. The data will be displayed on the LCD.

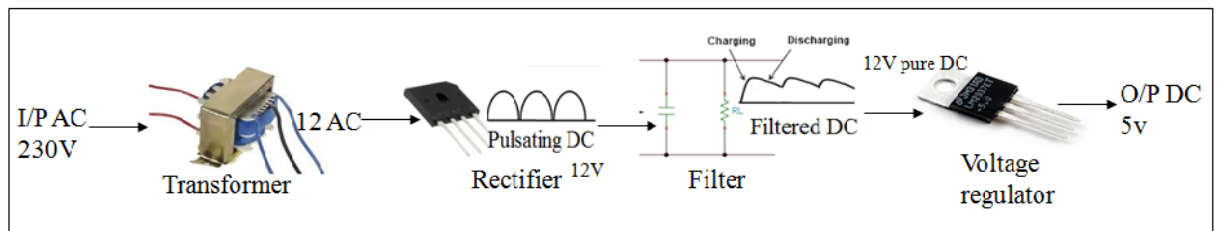
Major blocks present in this project:

1. Regulated power supply
2. Micro controller
3. GSM Module
4. ESP8266 Module
5. Current Transformer
6. Voltage Transformer
7. LED Indicator
8. Crystal Oscillator
9. Reset Button

Software's used in this project:

1. PIC Compiler for Programming.
2. Express SCH for Circuit design.

Regulated power supply:



Block Diagram:

