

# Overhead Transmission Line Multiple Fault Detection using IoT

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**Abstract:** In the modern era transmission line is the most important part of the power system. In Electricity journey the generation of transmission, distribution, utilization of electrical power is called electrical technology in power generation transmission and distribution many components are involved. So, there are many types of electrical faults or faults like in transmission lines occurs in transmission system like line to line faults and line to ground fault in power system etc. This project shows the prototype of three phase fault detection system. Mainly occurred in H.V transmission line our project accurately detect of three phase fault from source system and display on blynk app by using a ESP 8266 Node MCU. In this project we use sensing device which is present on the line even though line-line, line-ground, and any unsymmetrical fault was occurred it will show on display. ESP 8266 Node MCU is a heart of our project it will detect the fault, analyses and classifies these faults. Then, the fault information is transmitted to the blynk app.

**Keywords:** ESP 8266 Node MCU, Transmission line, Transformer, Internet of thing (IOT), Prototype and Blynk App.

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