

## Abstract Details

**Title:** Fault Detection with Password based Protection System

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**Abstract:** This paper focuses on the detection and classification of the faults in electrical power transmission line using microcontroller. Power systems often expertise variations in their operation, that are principally manifested as cable faults. Over the past decade, numerous techniques of fault diagnosing are developed to confirm reliable and stable operation of power systems. In this project, special care is given to that person who is resolving the fault on line. So for this purpose, in this project first it will detect the fault in line and give a signal on display about the type of fault in line and weeping a buzzer if anybody is not near the display. After that a person goes to clarify the fault that person will save its identity in password based protection system which is given in this project in special care and will clarify the fault. During this period, if other person wants to turn on the line then line will demand password and if the password is matched then line will be turn on otherwise it will be denied. This project is used to detect the fault and give the protection also from electric shock during the resolving fault. During this period our circuit will isolate the line completely which is faulty by giving password protection given by the person who is resolving the fault on line. In this project we detect three types of fault, single line to ground fault, line to line fault and high temperature fault.

**Keywords:** Fault Detection, Protection System, Microcontroller.