GSM BASED UNDERGROUND CABLE FAULT DISTANCE LOCATOR

A project report submitted in partial fulfillment of the requirements
For the award of the degree of

BACHELOR OF TECHNOLOGY
IN
ELECTRICAL & ELECTRONICS ENGINEERING

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CERTIFICATE

This is certify that the project report entitled **"GSM BASED UNDERGROUND CABLE FAULT DISTANCE LOCATOR"** is a bonafide work submitted by **R.GANGADHAR RAO, T.VENKATESH, A.JOHN, M.PRAKASH, N.PAVAN** in partial fulfillment of the requirements for the award of degree of

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ABSTRACT

This paper proposes fault location model for underground power cable using microcontroller. The aim of this project is to determine the distance of underground cable fault from base station in kilo meters. This project uses the simple concept of ohm's law .When any fault like short circuit occurs, voltage drop will vary depending on the length of fault in cable, since the current varies. A set of resistors are therefore used to represent the cable and a dc voltage is fed at one end and the fault is detected by detecting the change in voltage using a analog to voltage converter and a microcontroller is used to make the necessary calculations so that the fault distance is displayed on the LCD display.

GSM is a mobile communication modem ; it is stands for global system for mobile communication (GSM). It is widely used to mobile communication system in the world. GSM is a open and digital cellular technology used to transmitting mobile voice and data service operates at the 850MHz, 900MHz, 1800MHz, 1900MHz frequency band. The GSM system was developed as a digital system using time division multiplying access(TDMA) technic for communication purpose