



# Power System Protection Lab

## Comprehensive

### Affordable

## Product Highlights

## Features :

- Each relay is provided with its test kit in the same panel, making it easy to conduct experiments.
- Each test kit is designed by considering the needs of the experiment to be performed.
- Ammeters and Voltmeters on each panel for necessary instantaneous measurements, hence no need for external / additional meters.
- Inbuilt timers in every kit for operating time measurement and to verify the characteristics.
- Customized design to meet the varying requirements.
- Every kit comes with MCB and Fuse protection for safety.
- User friendly control buttons for easy operation.
- Removable back panel for easy viewing of relay terminal blocks.
- Phase Angle variation control in steps of 30° for testing differential relays.
- Phase sequence changer for checking negative sequence relays.

## List of Experiments :

- Characteristics of IDMT Over Current Relay
- Characteristics of Earth Fault Relay
- Characteristics of Over / Under Voltage Relay
- Pick Up and Drop Off for Instantaneous Over Current Relay
- Characteristics of Differential Relay
- Characteristics of Negative Sequence Relay
- Characteristics of Reverse Power Relay
- Characteristics of Directional Over Current Relay
- Characteristics of Over Fluxing Relay
- Characteristics of Distance Protection Relay
- Characteristics of Frequency Relay

Easy to Use





#### Conceptualized by Industry Experts for academic Institutions

In the electrical engineering stream, the aspects of power system analysis, operation and control are imparted both in UG and PG level. Power system protection is a branch of electrical power engineering that deals with the protection of electrical power systems from faults through the isolation of faulted parts from the rest of the electrical network. The objective of a protection scheme is to keep the power system stable by isolating only the components that are under fault, whilst leaving as much of the network as possible still in operation. Thus, protection schemes must apply a very pragmatic and pessimistic approach to clearing system faults. For this reason, the technology and philosophies utilized in protection schemes can often be old and wellestablished because they must be very reliable.

The Integrated Relay Test Kit is an sophisticated module developed with the purpose of helping students in their understanding of some basic ideas in power systems protection. This hardware will also help the students to demonstrate the effects of different characteristics of different relays within the lab with easier experiments.

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