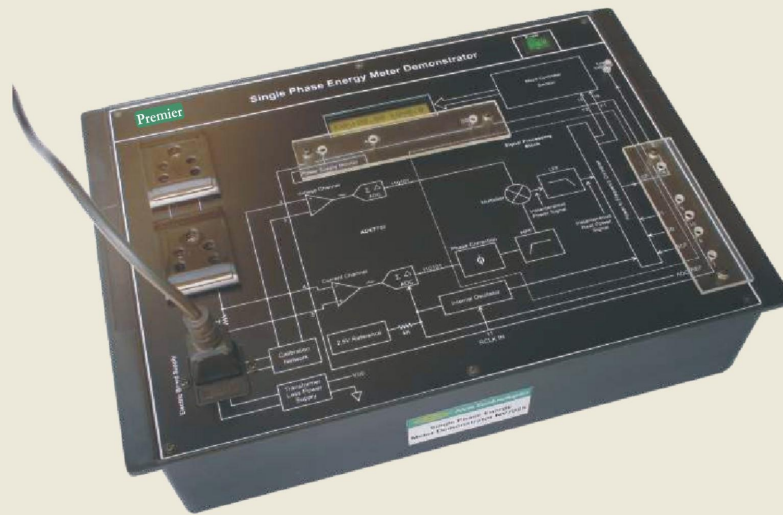


Single Phase Energy Meter Demonstrator

Single Phase Energy Meter Demonstrator describes a high accuracy, low cost, single-phase energy meter. The meter is designed for use in single-phase, 2-wire distribution systems.

This is a highly integrated system comprised of two ADCs, a reference circuit and a fixed DSP function for the calculation of real power. Highly stable oscillator is integrated into design to provide the necessary clock for IC. This includes direct drive capability for LCD Display and high frequency pulse output for Calibration.



Technical Specifications

Meter Constant	: (1600 / 3200) impulses / kWh (On LED)
Maximum Current	: 30 A
Shunt	: 350 mW
Resolution	: 0.01 unit
Mains Supply	: 90 V - 275 V, 50 / 60 Hz
Dimensions (mm)	: W 365 x D 260 x H 120

Scope of Learning

- Functioning of Single phase Energy Meter
- Calibration of Single phase Energy Meter
- Study of Single phase Energy Meter for different load conditions
- Study of Single phase Energy Meter using different test points.

Features

- ▶ Complete training system for in depth study of Single Phase Energy Meter
- ▶ Micro controller based LCD display
- ▶ The display acts as a counter of units consumed as well as it shows the wattage of load and the time since the system has been ON
- ▶ Easy diagrammatic representation of Energy Meter
- ▶ Test points are provided to measure the voltages at different points
- ▶ Low Cost Trainer with high accuracy, demonstrating all the basic concepts of Single Phase Energy Measurement
- ▶ Good quality, reliable sockets are provided at appropriate places on board for electric board supply and load connections
- ▶ Designed with considering all safety standards
- ▶ Learning Material CD
- ▶ 2 Year Warranty