

List of experiments

1. I-V and P-V characteristics with series and parallel combination of modules.
2. Effect of variation in tilt angle and shading on PV module power.
3. Power flow calculations of standalone PV system of DC load with battery.
4. Power flow calculations of standalone PV system of AC load with battery.
5. Power flow calculations of standalone PV system of DC and AC load with battery
6. Charging and discharging characteristics of battery.
7. Interfacing of hardware using RS232 ports and suitable software.
8. Evaluation of Active, Reactive Power & Apparent Energy Flow between Grid-Tied Inverter, Grid & Load and Net Metering concept
9. Grid Synchronization of Solar PV Inverter and its Performance Analysis
10. Impact of Transmission Line Inductance on Voltage Quality at PCC.