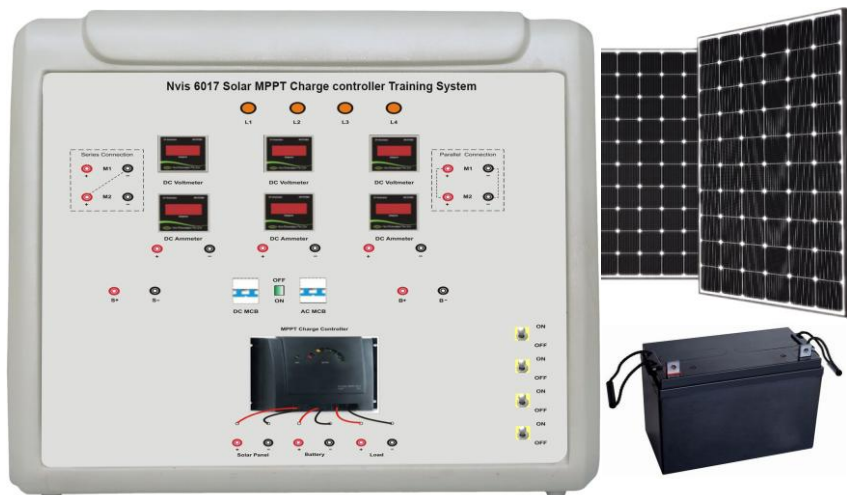




Solar MPPT Charge Controller Training System

Nvis 6017



It is desirable to operate the PV module at the maximum power point so that maximum power can be delivered to the load under varying temperature and insolation conditions. This is where MPPT (Maximum Power Point Tracking) charge controller comes into the play in the system.

This set up helps to understand the difference between MPPT charge controller depending on

- Time taken by battery to get fully charged
- To measure input power and output power to get efficiency of MPPT charge controller
- Effect of sun tracking at different angle of inclination

Features

- Performance analysis by comparing the output of the PV module with MPPT Charge Controller
- Display units for Voltage and current measurement.
- System integrated with MPPT charge controller along with the batteries.
- Simple variable load demonstration by varying the rheostat.

Scope of Learning

- Find out the efficiency of MPPT based charge controller at different load conditions
- Performance analysis of MPPT type charge controllers.
- Study the effect of change in voltage and current of solar panels by series and parallel connections.

Technical Specifications

Control Panel	:Control board consist of high grade FRP material to provide utmost safety to the users
Switches & Connectors:	BS10 Safety Terminals
Solar PV Module	:Poly Crystalline Technology
Charge Controller	:MPPT – Charge Controller with reverse polarity protection for battery as well as load
DC Voltmeters	:0-300 VDC
DC Ammeter	:0-20 Amp.
Battery	:12V, 42Ah
Load	:Load Type : Resistive rheostat 110Ω 8Amp