Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Solar Photovoltaic Professional

Product Code :

SLE/PHY/220



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Description :

Solar Photovoltaic Professional (Product Code: SLE/PHY/220) is a modular photovoltaic training system used to teach PV fundamentals, component analysis and the design of complete off-grid PV systems on a laboratory scale. Built for vocational courses, apprentices, technicians, PV installers, sales training and engineering students, it works as a full solar cell characteristic kit and adds an MPP tracker, PWM, series and shunt regulators and a DC/AC inverter. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India.

Specifications

Parameter	Detail
System type	Modular photovoltaic training system in an aluminium case
Intended users	Studies and courses in renewable energies: training of sales representatives, apprenticeship, in-service training of technicians and PV installers, basic education of engineers
Solar modules	1 x 5.33 V, 370 mA; 3 x 0.5 V, 420 mA; 3 x 0.5 V, 840 mA; base for solar panel; solar cell cover set (4 pieces)
Light source	Lamp housing with 80 W illuminant; 3 x lighting module (with safety sockets)
PV system modules	MPP-Tracker Pro with manual mode, PWM regulator Pro, series regulator module Pro, shunt regulator module Pro, deep discharge protection module Pro, DC/AC-Inverter Pro, capacitor module Pro, diode module Pro
Consumers	LED module (high brightness) Pro, light bulb module Pro, motor module Pro with propeller, radio module Pro
Resistors	Potentiometer module Pro; 2 x resistor module (triple) Pro; resistor plug elements: 1 x 33 ohm, 3 x 100 ohm, 2 x 10 ohm
Measurement and power	2 x AV module; 1 x power module
Base and connections	Solar-base unit Professional; safety test leads: 4 red and 3 black 25 cm, 2 red and 1 black 50 cm; 3 x safety short-circuit plug with mid socket
Case	Aluminium case PV Professional with insert
Documentation	Layout diagram 1118 PV Professional; info sheet for initial startup
Electrical engineering experiments	Measurement of voltage, current and power; Ohm's law; parallel connection of resistors (current divider); series connection of resistors (voltage divider)
Photovoltaic basic experiments	Characteristic curve of solar modules; dark characteristic curve of solar cells; I-V characteristics versus illumination and temperature; series and parallel connection of solar cells; power versus surface area, angle of incidence, illumination and illumination under load; internal resistance versus illumination; shading effect; I-V characteristics, MPP and fill
Pho	