Email : sales@scilabexport.com
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Product Name :

Solar Smart Grid Professional

Product Code :

SLE/PHY/222



Science Lab

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Description :

Solar Smart Grid Professional (Product Code: SLE/PHY/222) is a basic training system used to build, measure and control a smart grid on a laboratory scale in vocational and technical education. As advanced physics lab equipment, it combines wind and photovoltaic generationwith lithium-iron-phosphate battery and fuel cell storage, while two Smart Meters let learnersmeasure and steer energy flows during grid stability scenarios. It is manufactured by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India.

Specifications

Parameter	Detail
System type	Smart grid training system for vocational and technical education, in acase
Generation	Solar module 5.22 V, 380 mA with base for solar panel; Solar-Windturbine module Pro with wind machine, Solar-Wind rotor set and propeller;2 x power module
Light source	Lamp housing with illuminant 120 W, 12°; azimuth angle scale
Energy storage	LiFePO4 battery, AAA size, in battery module holder 1 x AAA Pro; reversible fuel cell with fuel cell holder Pro; capacitor module Pro
Grid and control modules	2 x Smart Meter; 2 x grid module Pro; MPP-Tracker Pro; diode module Pro; potentiometer module 110 ohm Pro
Consumers	2 x light bulb module Pro; motor module Pro
Measurement	Smart Meters for measuring and controlling energy flows; AV module
Base and connections	2 x Solar-base unit Professional; safety test leads 25 cm (5 red, 4 black) and 50 cm (4 red, 4 black); 6 x safety short-circuit plug with mid socket
Case	Smart Grid Pro case with insert and lid foam cut to 625 x 345 x 5 mm
Documentation	Info sheet for initial startup; packing layout plan Smart Grid Professional
Smart grid experiments	Daily power fluctuations of a PV power plant and of a wind power plant; energy supply of a building by conventional plants, by conventional and PV plants, and by conventional and PV plants with storage; grid stability with PV plants, depending on consumer load, depending on wire length, with smart transformer stations and with storages; grid integration of e-mobility; voltage behaviour and grid stability in a radial distribution system; conductor rope management
Further topics	Fundamental experiments on the individual components; pre-set or user-created scenarios; demand-side management; conductor rope monitoring
Product code	SLE/PHY/222
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the Solar Smart Grid Professional Used For?

The S gy
store
profe ell

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