

40W BASIC OFF GRID SOLAR POWER TRAINER MODEL:RE101-S-OG40

The 40W Basic Off-Grid Solar Power Trainer is an educational tool designed to teach users about solar energy systems and off-grid power solutions. It features a compact solar panel, battery storage, and essential components that allow hands-on experimentation with solar energy generation and storage. Users can learn about system installation, energy management, and the fundamentals of renewable energy technology. This trainer is ideal for students, educators, and enthusiasts interested in sustainable energy practices and solar power applications.

Able to learn : -

- Characteristic of Solar PV Module
- Understand the solar system diagram and connection
- Analysis, size and installation of solar PV module
- Temperature, tilt angle and isolation effect on solar power output
- Use of solar charge controller parameter setting
- PV power output depend on the angle of incidence of the light source
- Simulation power output of a solar PV module depending on the position of the sun
- Series & parallel connection of solar PV module
- DC to AC conversion by inverter
- DC and AC load testing

Required Item : -

- | | |
|------------------------------------|--------------------|
| • 40W PV module training structure | • DC load |
| • Solar training work table | • AC load |
| • 100W light source | • Battery unit |
| • DC combiner | • AC DB |
| • DC surge protection device | • Irradiance meter |
| • Charge controller | • Connecting cable |
| • Inverter | • ACDC multimeter |



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Technical Specification : -

No	Component	Qty
1	DC voltage input module	1
2	DC Combiner module	1
3	DC Solar Charge Controller Module	1
4	DC 7Ah Battery Module	1
5	DC AC inverter Module	1
6	DC Load Module	1
7	AC Energy Meter Module	1
8	Training Workstation 1200x750x1500	1
9	20W solar PV module	2
10	100W halogen flood light	1
11	Portable swivel PV workstation	1
12	DC Solar cable	1
13	DC MC4 connector	10
14	Irradiance Measurement meter	1
15	ACDC Multiter meter	1

