# BSET – Basic Solar Energy Trainer


The Solar Energy Trainer introduces the fundamentals of a solar cell (photovoltaic Cell) and conversion of the suns photons into electrical energy. This can be monitored with a built in voltmeter and ammeter to measure the voltage and current produced. The Trainer allows the study of the characteristics and application of solar energy and the charge of batteries using solar energy.

**Experiments**

- Calculation of voltage and current of solar cells
- Calculation of voltage and current of solar cells in parallel
- Study of V - I curve and power curve of solar cells to find the maximum power point (MPP) and efficiency of a solar cell
- Calculation of solar cell efficiency
- Application of solar cells in domestic use
    1. Charging battery
    2. Operating a lamp, fan and radio

**Specification**

| | |
|---|---|
| Solar Panel | 6 solar cells |
| | Maximum Voltage of each solar cell : 1.5 V |
| | Maximum Current of each solar cell : 150 mA |
| Voltmeter | 0 – 10 V |
| Ammeter | 0 – 500 mA |
| Potentiometer | 5K |
| 2 AA Rechargeable Battery NiCd battery | 1.2 V |
| Bulb | 1.2V 270mA |
| Fan | 1.5V 400mA |
| Dimension (mm) | 365 x 265 x 120 |

**Ordering Information**

| | |
|---|---|
| **Model Number:** | **BSET** |
| *Consists of:* | Solar Cell Panel |
| | Trainer including Voltmeter and Ammeter |
| | Chargeable batteries |
| | Connecting Cables |
| | Manual |

***Notes.***

***1. Specification is subject to change without notice.***

***2. All dimensions are in mm unless otherwise stated***

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