

Product Name :

Flat Plate Solar Thermal Energy Collector

Product Code :

SLE/ESA/06



Description :

- This equipment shows how a flat plate solar energy collector works.
- Cold mains water enters the collector.
- Sunlight energy heats the water in the collector.
- A box with a clear cover encloses the panel, forming the collector.
- The collector has a purpose designed and built panel for quality and reliability.
- It allows students to measure and find the efficiency and heat losses of a flat plate solar energy collector.
- A sturdy mobile frame supports the collector. To allow users to adjust its angle, the frame has a hinge.
- The heated water returns to a pump that mixes the heated water with the incoming cold water.
- A pressure sensitive valve allows the heated water to leave the equipment at the same rate as cold water enters it.
- A flow transducer measures the water flow rate and a solarimeter (or pyranometer) measures incident radiation.
- The panel has a thin sheet metal absorber backed by riser tubes and insulating material to reduce heat loss to the rear.