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**Product Name :**  
Domestic Water Heating With Flat Collector

**Product Code :**  
LBNY-0005-12500022



**Description :**

The trainer can be used to demonstrate the principal aspects of solar thermal domestic water heating in a system with components used in real world applications. The heat then gets into the hot water circuit via a heat exchanger. Radiant energy is converted into heat in a commercially available flat collector and transferred to a heat transfer fluid in the solar circuit.

**Learning Objectives/Experiments:**

Determining the collector efficiency  
Relationship between temperature difference and collector efficiency  
Determining the net power  
Familiarization with the functions of the flat collector and the solar circuit  
Relationship between flow and net power.

**Technical Specification :**

Trainer for investigating the function and operating behaviour of a flat collector  
Solar circulation station with pump, expansion vessel and safety valve  
Hot water circuit with buffer tank, pump and plate heat exchanger  
Four bimetallic thermometers  
Solar thermal flat collector with selectively absorbing coating  
Adjustable collector tilt angle  
Solar controller with temperature, flow and illuminance sensors.



**Laboratory Instrument India**