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**Product Name :**  
Solar Distillation Apparatus

**Product Code :**  
LBNY-0005-1730001



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#### **Description :**

This contains the brine liquid to be studied and is covered by a sheet of flat plate glass, set at an angle of 12° to the horizontal, so that water condensing on it readily runs down to the lower edge. Water evaporating from the tray condenses on the inside surface of the glass cover, runs down to the lower edge and collects in a channel alongside the evaporating basin, from whence it drains to a volumetric measuring vessel. Solar Still Basin Type: This includes a shallow square evaporating tray, the base of which is fitted with removable heat insulating material which assists in the evaporation process. Temperature measurement by multi-point thermocouple instrument is provided at the following points: - feed, brine (output), ambient, glass (outside), glass (inside), the vapour space, centre of tray (under mat), mat (top side). The whole top section of the still may be turned horizontally through 180, so making it possible to alter the angle of incidence of sunlight on the absorbing pad. An optional pen recorder is available to continuously record these temperatures.

#### **Features:**

Horizontal rotation of basin through 180°  
Non corrosive materials used in all critical areas  
Temperature measurement at eight points  
Pen recorder to continuously record temperatures  
Variable angle of incidence of sunlight on the absorbing pad Variable thermal insulation material mounted horizontally on a rigid steel stand  
Ability to tilt base continuously by +5° and -5° to the horizontal  
Removable solar radiation mat  
Extendable tray angles and hence flow rates.

#### **Technical Specification :**

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**Experimental Capability:**

Effect of inclination, ambient temperature, wind velocity and the effect of cooling the glass cover

Demonstrates the onset of reflux

Measures output and efficiency against solar energy input, amount of base insulation, brine depth

Effect of different absorbent surfaces

Investigate the comparison between all characteristics of the two units under identical conditions

Investigate the effects of varying the inclination of the absorption surface and the flow rate, recording at the same time the film thickness



**Laboratory Instrument India**