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Product Name : Solar Power Unit	**Product Code :** LBNY-0005-1730003

Description :

Energy of solar origin stored in the battery can be converted into kinetic energy by the use of the electric motor and measured by the dynamometer and tachometer system. The characteristics of the photovoltaic cell array can be determined by the instrumentation provided. As shown in the illustration, the power element in the unit is a photovoltaic cell array comprising thirty-six silicon cells connected to a control unit incorporating a storage battery, and a switched loading system consisting of an electric motor and dynamometer and a bank of resistors. The photovoltaic cell material employed is highly efficient giving an energy conversion of around 10%, i.e. an output of the order of 100 watts per square meter in full sunshine. Provision is made for the use of recorders to indicate both the output of the solar cell array and the output of the storage battery. It is normally mounted out of doors at an angle to the horizontal, the angle being determined by the latitude of the location, alternatively a suitable lamp can be used.

Features:
Highly efficient energy conversion - 100 watts/metre2
Does not require complicated reflecting systems
Collects and stores solar power
Stored energy can be converted for use by electric motor

Technical Specification :

Solar Power Unit comprising six module photovoltaic cell array for mounting externally with maximum output about 9W and control unit for laboratory use comprising switching circuit, voltmeter, load resistors ammeter, dynamometer system and tachometer all carried in a high quality instrument case and large capacity lead acid battery supplied in dry charge condition. Supplied complete with 30m of external quality cable.

Laboratory Instrument India