

## Solar AC Water Pump Demonstrator Nvis 439A



\* Image is for illustrative purpose and subject to change

**Nvis 439 Solar AC Water Pump Demonstrator** is designed to provide training to the student for learning of basic concept of solar pumping. To ensure nonstop irrigation in all weather conditions MPPT technology has been used in commercial pumps.

Nvis offers Solar Water Pump Demonstrator which includes Solar Panels, Solar MPPT Controller, and Water Pump with its mechanical structure having one source tank an one overhand tank to be used in its operations. It contains all necessary protections to ensure long life and continuous operation.

#### **Features**

- Unique system for electricity generation through solar system and learning
- Complete solution for learning solar photovoltaic system
- Provided with measuring devices for analysis of parameters
- Provided with all safety protections

- Provided with source and overhead tanks to study Solar Pump
- Equipped with MPPT based solar charge controller
- A complete demonstration of conversion of Solar Energy into Electrical Energy
- Environment Friendly



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### **Scope of Learning**

- Study of solar power generation system and its working while operating Solar AC Pump
- Measurement and analysis of different parameters (Open circuit voltage (Voc) and short circuit current (Isc)) of solar PV module of solar PV module
- Parameters measurement with parallel solar PV modules
- Parameters measurement with series solar PV modules
- Understanding & estimating solar PV system

### **Technical Specifications**

System includes listed components with its technical descriptions as given below.

Solar panel

Power Rating : 1KW

Cell type : Polycrystalline

Solar panel structure

Material : GI

Assembly : Detachable and easy to install

**AC Water Pump** 

Pump type : Surface Pump

Operation : Solar

AC Water Pump : 1 HP

**Mechanical Structure** 

Source Tank : 1No.

Overhead Tank : 1No.

Material of Tank : SS

Tank dimensions (mm) approx. : L 500 x W 350 x H 315

Solar controller

Technology : MPPT

Power Rating : 1 HP.

**Digital Meters** 

DC voltmeter : 1No.

DC ammeter : 1No.
AC Voltmeter : 1No.

**Terminals** : BS10 type for safety purpose

MCB : 1No.



Note Shown image is just for illustration original may differ

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