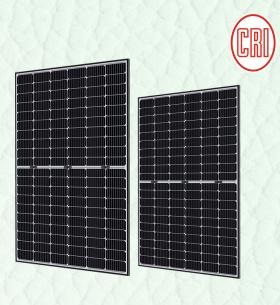
## **SOLAR PV MODULES**

Solar PV modules, commonly referred to as solar panels, are assemblies of photovoltaic cells that convert sunlight into electricity. Designed to be durable and efficient, these modules typically last around 25 years.

Solar PV modules represent a crucial technology in the transition to renewable energy. With advancements in efficiency and reductions in cost, they are becoming an increasingly viable option for meeting both residential and commercial energy needs.



#### MODULE MOUNTING STRUCTURE

The module mounting structures are lightweight, easy to assemble, and scalable, making installation quick and cost-effective. They also enhance the system's aesthetics, providing a clean and organized appearance that increases the property's value while promoting sustainability. Overall, solar pump module mounting structures are a crucial component of a successful solar pump system, offering stability, ease of installation, and enhanced aesthetics.



#### REMOTE MONITORING SYSTEMS

Remote monitoring systems for solar pumps leverage IoT technology to track and analyze the performance of solar-powered water pumps in real-time. These systems provide valuable insights into energy production, pump operation, and efficiency, enabling proactive maintenance and optimization. Users can access performance metrics through intuitive digital interfaces, ensuring effective management and prompt responses to any issues that may arise.

Remote monitoring systems for solar pumps represent a significant advancement in solar energy management. By providing users with the tools needed to optimize performance, ensure reliability, and promote sustainable energy practices, these systems enhance operational efficiency and facilitate informed decision-making. The communication modes available in these systems include RS 485, RS 232, GSM, and GPRS.



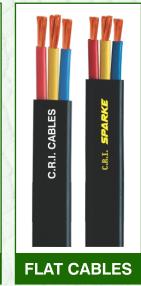
## **BALANCE OF SYSTEM**

The solar Balance of System (BOS) is a crucial component of any solar power system, ensuring smooth functioning and efficiency. Key components include the pipe cable, which connects solar panels to the inverter and electrical components, and the lightning earthing, which protects against lightning strikes. These components ensure safe and efficient transfer of electricity, preventing damage and safety hazards.

Investing in high-quality pipe cables and lightning earthing ropes is essential for solar power system owners. These components help maximize system effectiveness and performance, ensuring longevity and reliability. By prioritizing BOS components, system owners can protect their investment and enjoy efficient, sustainable energy generation.









In view of continuous developments, the information / performance / description / specification / illustrations





# **Vision, Mission and Values**

To be the industry leader providing best-in-class fluid management solutions to individual and institutional customers and societies in our chosen markets.

We will achieve this through our dedicated efforts to enhance the welfare of all our stakeholders and by living by our values of Commitment, Reliability and Innovation.

### **PROFILE**

C.R.I. ranks high among the world's fastest-growing fluid management solution providers with a wide global presence. C.R.I. offers Pumps, Motors, IoT Drives & Controllers, Pipes, Wires & Cables, Solar Pumps and Controllers to meet the pumping needs of its wide customer base.



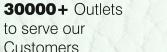
of Engineering



120+ Countries have our strong global presence



Manufacturing Units around the World





Products for various applications



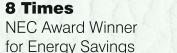
Service Centres to support our Customers

1500+



**EEPC Award Winner** for Export Excellence







**Technology Centre** Recognized by Ministry of Science & Technology, Govt. of India.

Fludyn Advanced



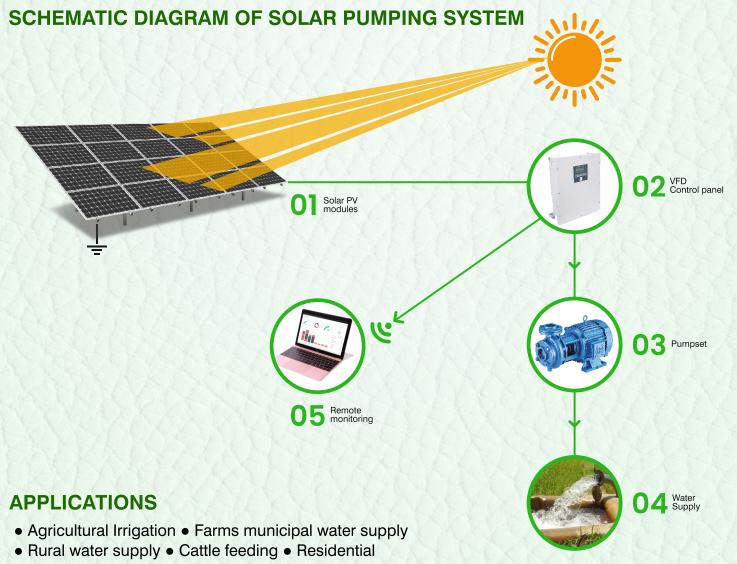
## C.R.I. SOLAR PUMPING SYSTEMS

C.R.I. solar water pumping systems are designed to provide an efficient, sustainable, and cost-effective solution for water pumping needs. By leveraging solar energy, these systems minimize environmental impact while ensuring a reliable water supply.

A typical C.R.I. solar water pumping system consists of several key components, including solar photovoltaic (PV) modules, a pumpset, a solar pump controller, and a mounting structure. Additionally, the system includes essential balance of system elements, such as earthing, lightning protection, pipes, cables, and ropes. These components work together seamlessly to ensure efficient water pumping using solar energy.

#### SALIENT FEATURES

- The system is built to withstand extreme weather conditions, ensuring durability and reliability.
- Solar pumps contribute to reducing carbon emissions and pollution, promoting sustainable practices.
- High operating efficiency & low maintenance
- System having provision for operating through Solar & Electricity by power sharing Methodology



## C.R.I. STAINLESS STEEL SUBMERSIBLE PUMPSETS

C.R.I. Stainless Steel Submersible pumpsets are made of corrosion resistant stainless steel with built in check valve. All vital components of these pump models are made of high quality 304/316 grade stainless steel. The Optimal design of impellers and diffusers enables the best possible hydraulic efficiency

These pumps are of multistage centrifugal type, powered by an AC/DC power supply, rewindable submersible motor, suitable for continuous duty. Motor Stator is made up of low watt loss Silicon Steel Laminations and wound with high grade insulated copper windings wires which ensures high efficiency of the Motor.

## SALIENT FEATURES

Designed for wide voltage operations • Corrosion-resistant fully Stainless Steel pumps ensures longer life • Highly reliable and hygienic • Optimized hydraulic design for efficient performance.



Submersible Pumpset	100mm to 150mm
Power Range	0.75kW to 11kW (1HP to 15HP)
Type of Supply	AC & DC

#### C.R.I. SOLAR PUMP CONTROLLER

C.R.I. Solar Pump Controller converts the D.C. supply generated from the solar panels into A.C. supply with variable frequency for optimal speed control of the pump by maintaining the V/F Ratio.

With the function of MPPT (Maximum Power Point Tracking), it will regulate the speed of the motor according to irradiation in real time to achieve the maximum power and maximum output of water.

## SALIENT FEATURES

LCD Display / IP65 enclosure •MPPT Algorithm • Remote Monitoring System • In-Built Protections - Over Current / Short Circuit / Earth / Reverse Polarity / Surge & Dry run.

#### **SPECIFICATIONS**

Model	CRI V4.0
Power Range	0.75kW to 11kW (1HP to 15HP)
Maximum DC Voltage	120 VDC - 800 VDC
Maximum PV Current	10 A - 30 A
Output Voltage	80 V - 480 V (AC/DC)



