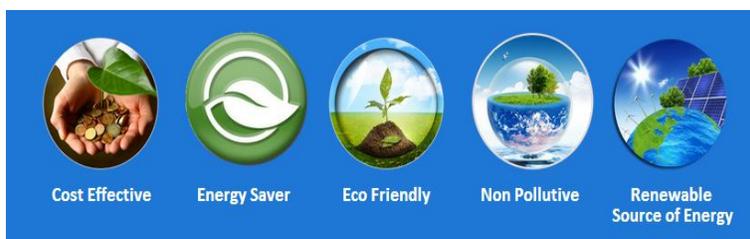


# LOBEL VFD CONTROLLER & Shine Power Panel



## Lobel Solar Power System



# Shine Power Panel

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Rural India, the agricultural heartland of the country, is plagued by a severe electricity deficit. On the other hand, the country receives enough sunlight in a year. To meet all its energy needs. So, it is not surprising those farmers, industrialists and even housing Societies are switching to solar power as an alternate power source. And, Lobel Solar Systems is leading the way towards a reliable, cost-effective pumping solution that works on solar and regular 3 phase power supply- the Shine Power Panel.

## Single Panel Dual supply

### **The Shine Power Panel offers farmers a range of benefits:**

- Flexibility: Only Standard Power Panel that can operate a pump on both, solar and 3-phase supply.
- Compatibility: Compatible with surface and submersible pumps as well as Induction and Permanent Magnet Motors.
- Convenience: Switches between Solar power and 3-phase power automatically or manually.

## In-built MPPT Great savings

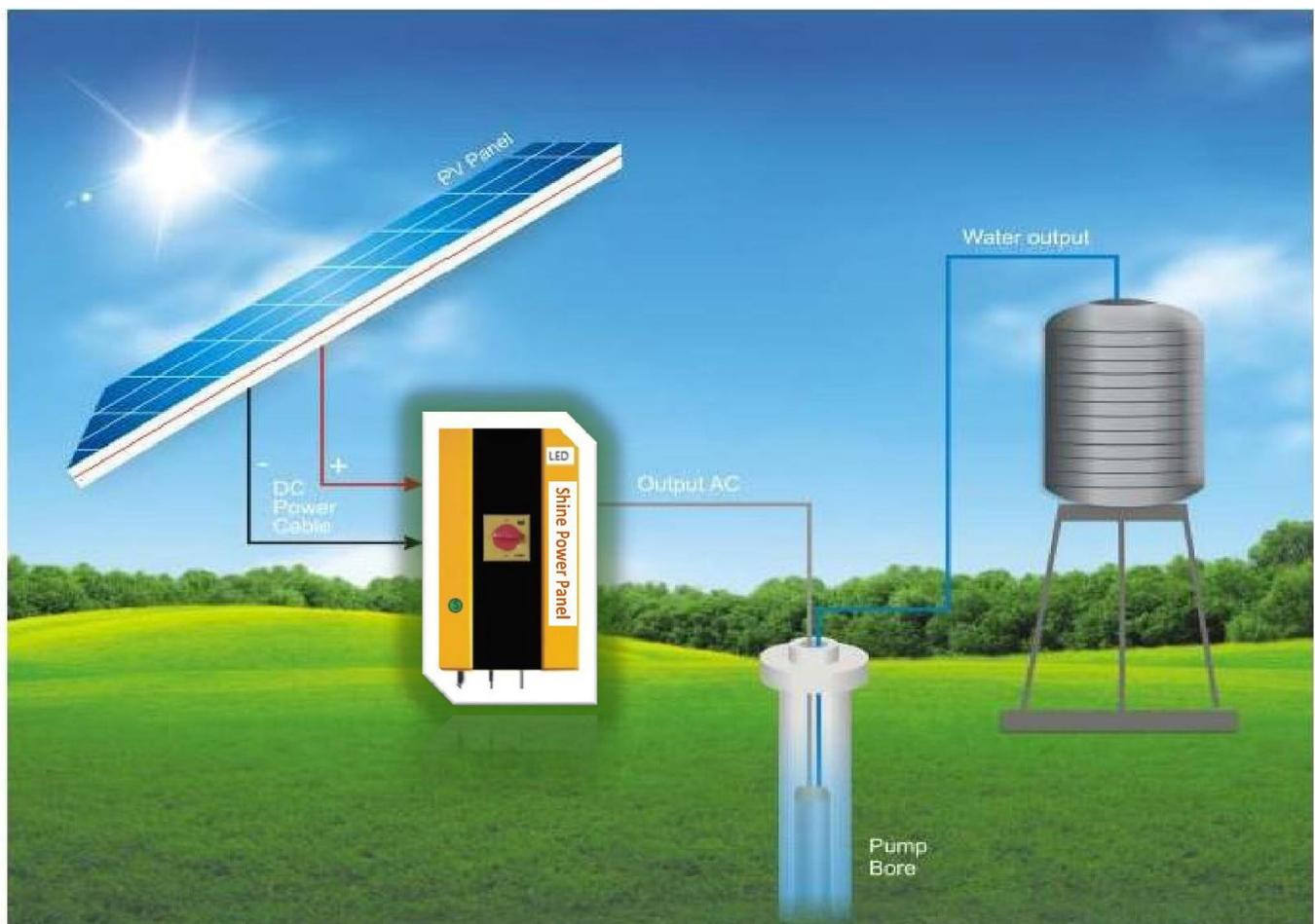
The Lobel Solar Systems Shine Power Panel is the only standard AC Panel that offers an in-built Maximum Power Point Tracker (MPPT). It has a range of unique features that can help you save.

- Maximum power, maximum output: The in-built MPPT helps you extract the maximum available power from the Solar PV, since no extra hardware is required for tracking power Enhanced conversion rate: The conversion from DC input to 3-phase AC takes place even at 300V DC which remains constant irrespective of the drive rating.
- Increased efficiency: An internal MPPT does not consume any extra power, thereby enhancing the overall efficiency and providing automatic calibration of the maximum power point.

## Tough outside → Smart inside

- Rugged all-weather casing for greater durability.
- Auto-restart facility.
- Built-in energy monitoring.
- Conformal coating to vital components to protect against harsh environment.
- Complete motor protection.
- Stores last 10 faults with fault trace for last fault.
- Provides information on maintenance and remaining life of components.
- Highly-integrated design results in fewer parts and interconnections, reducing the number of failure points.
- Plug in cooling fan means easy maintenance.
- Dry run protection.

## Schematic diagram of Shine Power Panel installation



## Shine Power Panel Specifications

<b>Standard Specifications</b>	<b>MPP voltage range (Vmpp)</b>	<b>550-610V</b>
	Maximum Open Circuit Voltage (Voc)	<b>800V</b>
	Output Voltage	<b>Proportional to input voltage</b>
	Output frequency	<b>0 -400 Hz</b>
	Over voltage protection	<b>Yes</b>
<b>Protection</b>	Short-circuit protection	<b>Yes</b>
	Under voltage protection	<b>Yes</b>
	Output phase loss	<b>Yes</b>
	Motor Overheat protection	<b>Yes</b>
	Ground Fault protection	<b>Yes</b>
<b>Environmental tolerances</b>	Area of use	<b>Indoor   Outdoor (with Enclosure)</b>
	Ambient Temperature	<b>-10 to +50oC without deration</b>
	Humidity	<b>95% RH or less (no condensation)</b>
	Altitude	<b>Upto 1000 meters</b>
<b>Standard Compliance</b>	<b>RoHS compliant, UL 508C, EN61800-3, EN61800-5-1, EN954-1, ISO 13849-1, IEC/EN61508 SIL2</b>	

## Lobel Solar Power System



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