



# SOLEDEN POWER

**DETTECHNO-COMMERCIAL OFFER  
OF A  
GRID CONNECTED SOLAR PV SYSTEM FOR  
M/s Dr. Mukesh Gupta Ji  
Alwar Rajasthan**



(SYSTEM SIZE – 10 Kwp)

Proposal Number: SEP/24-25/040

Date: 21st August, 2024

CIN No: U93000RJ2017PTC057917

Email: [info@soleden.in](mailto:info@soleden.in)

GST Number: 08AAYCS6030P1ZF

Regd Office: A-154 H K M Nagar, Alwar, Rajasthan, 301001

For Soleden Power Pvt. Ltd.



"Commitment to Solar, Commitment to You"

Rev No: 00

Director



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## ABOUT US – WHO WE ARE?

Soleden Power is a venture started by alumnus of **IIT Kharagpur** and is aimed at providing green solutions. **Our Founder, Mr. Saurabh Sethi** has worked for Boeing, USA and was a core team member of designing a fully Solar Powered Aircraft.

Forté of Soleden Power lies in its core team which is formed from reputed and most trusted personalities of Alwar City as its Company Directors. The company encompasses a mixture of experience and youth in its Core team thus giving it wing of responsibility and calm leadership on one hand and idea and technology on other hand. Unlike other companies, which diversify their portfolios according to time, Soleden Power takes immense pride in its own and fully focused business of providing green solutions to its clients and in turn helping them to reduce their Carbon Footprints.

We provide Design, Engineering, Procurement, Installation and Commissioning of Solar Power Plant & Switchgear System with best quality of products and maintenance. We develop, plan, build and operate utility-scale, commercial and industrial photovoltaic plants.

We offer Solar PV products such as Solar Rooftop Power Plant under Net Metering Scheme, Centralized Solar street lighting system, Engineering & Consultancy of MW Scale Solar Power Plant, Operation & Maintenance of Solar Rooftop & Solar MW Scale Power Plant.

Soleden Power takes immense pride in its technical capabilities which has helped it to reach almost **15000KWp Solar Modules sale** in less than five year of its establishment. It has a goal to keep expanding its footprint and integrate green energy in people's life to make earth a better place to live and help in sustainable development.

### Our Unique Features

- We work closely with our clients in order to fetch them best possible returns from Solar plant.
- As prime contractor for high quality engineering, procurement and construction we lay special emphasis on **on-time, on-budget delivery of utility scale solar power plants optimized to provide reliable long-term system output for owners and investors.**
- We at Soleden integrate our technologies to attain maximum output and maintain highest standards. The plants that we install and the components that we use are high quality, of global standard and cost-effective.
- We ensure better efficiency and reliability of our solutions that give best possible returns and thus help our clients reducing their carbon footprints and secure better future for our generations by helping them produce their own electricity with the use of Solar rooftop.
- **We take proud in our excellent assistance and customer care services.**
- We take total guarantee of our services and work hand-in-hand with our customers helping them meet their needs the best way.
- We also provide an Emergency Service on a 24x7 365 basis with guaranteed response times given.

## Research Excellence:

Having top management from **IITs** and technical background, Soleden Power is fully devoted to providing its customer with customized and best solutions.

At Soleden, we like to deal in numbers, probabilities and possibilities. Thus, we on our part keep experimenting with various scenarios of effect of sunlight and shadow on the production of SOLAR and we keep studying the different brands of modules closely thus enabling us to provide our customers with best efficiency module.

It is this technical and research capability that has helped Soleden to erect plants which have given at their peak more than 6 Units/day/KW of plants of range of 100's of KW.

At present, owing to the capabilities of our research team, we are offering fully customized solutions for:

- Rooftop Grid Connected SPV plants for commercial, industrial and domestic consumers
- Petrol Pumps (Hybrid, Off-grid and on-grid Connected)
- Solar Pumps for Agricultural use/Farm House
- Cold Storages
- Hospitals

## Project Site and Solar Plant Details:

To be shared post confirmation of project

## BASIC PROJECT DESIGN:

In order to formulate basic project design, following activities are carried out on above site data:

1. Solar Resource Assessment
2. Shadow Analysis
3. Structural Analysis
4. PV Array Layout
5. Single Line Diagram

## SOLAR PV LAYOUT CONFIGURATION

– To be shared after the project has been finalized.

## Technical Proposal 1:

Sr. No	Item Name	Description	Make
1.	Solar PV Module	Modules (545-585)	Soleden Approved
2.	Solar Inverter	Standard	Solis/Growatt sungrow/Solplanet
3.	Remote Monitoring System	Capturing system performance indicators	Standard
4.	Cables and Accessories	As per requirement	Polycab or equivalent
5.	Electrical	Electrical MCB's	L&T/Schneider or eql.
6.	Earthing kit	GI Earthing Material	Reputed Make
7.	Structure	MS Primer Coated Heavy Duty C Channels as base structure	Standard



## COMMERCIAL PROPOSAL 1:

1	Solar PV System Cost	Total Turnkey execution cost of Subsidy System <b>@ Rs. 510000(including GST) less 78000 Subsidy from govt</b>  Total Turnkey execution cost of Subsidy System <b>@ Rs. 410000(including GST)</b>
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## TERMS AND CONDITIONS

1	Duties And Taxes	Inclusive of all + GST as applicable + Any Govt duty
2	Payment Terms	a) Advance 20% against Release of Order. b) 78% Against PI before dispatch of solar module on the day team starts working at site d) 2% on day installation of Solar Modules and Inverter is complete.
3	Scope of Work	a) Feasibility Analysis and preparation of DPR. b) Complete Design and Engineering of the project. c) Supply of Material for Rooftop Solar Power Project. d) Complete Erection and Installation of Rooftop Solar Power Project.
4	Warranty	a) PV Modules - 25 years performance based manufacturer warranty b) Inverters – 5/10 year warranty from manufacturer
5	Delivery & Installation Schedule	8-10 Weeks on Commercially Clear order and Advance Payment
6	Validity of Offer	15 Days from the date of offer. After this period a confirmation has to be Taken
7	Client Scope	Roof Access to be arranged and provided by the client Electricity & Water shall be provided by client during the construction All Documents related for Net Metering Connection should be provided.

\*\*Above quotation is valid for a period of 15 days. After 15 days, confirmation for pricing has to be taken again.

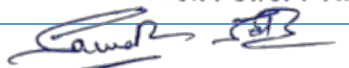
## Instructions for module cleaning

For the optimal operation of a PV plant, maintenance must be carried out on a regular basis. Maintenance guidelines for solar panels discussed below:

### 1. SOLAR PANELS

Although the cleaning frequency for the panels will vary from site to site depending on soiling, it is recommended that

- The panels are cleaned at least once every third day.
- Any bird droppings or spots should be cleaned immediately.



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- Use water and a soft sponge or cloth for cleaning. iv. Do not use detergent or any abrasive material for panel cleaning.
- Iso-propyl alcohol may be used to remove oil or grease stains.
- Do not spray water on the panel if the panel glass is cracked or the back side is perforated.
- Wipe water from module as soon as possible.
- Use proper safety belts while cleaning modules at inclined roofs etc.
- The modules should not be cleaned when they are excessively hot.
- Early morning is particularly good time for module cleaning
- Check if there are any shade problems due to vegetation or new building. If there are, make arrangements for removing the vegetation or moving the panels to a shade-free place.
- Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
- Never use panels for any unintended use, e. g. drying clothes, chips, etc.
- Ensure that monkeys or other animals do not damage the panels.

## INSPECTION AND MAINTENANCE SCHEDULE:

Component	Activity	Description	Interval	By
PV Module	Cleaning	Clean any bird droppings/dark spots on module	Immediately	Client
	Cleaning	Clean PV modules with plain water or mild or as per the dishwashing detergent. Do not use brushes, any types of solvents, abrasives, or harsh detergents.	Once every third day or as per site conditions.	Client

## Warranty terms & Conditions

### A. Product Warranty

For the components which are bought out by Contractor and supplied to the Project, the warranty shall be applicable as per the original manufacturer's warranty only and shall be transferred to the final Customer upon supply of the components. Standard warrantee offer by manufacturer are:

- I. Modules – 25 Year Industry leading linear power output warranty.
  - a. 90% performance warranty at the end of 10th year.
  - b. 80% performance warranty at the end of 25th year.
- II. Inverter – 5 Yrs Product warranty on material.

### B. Workmanship Warranty:



Workmanship related warranties are as below:

Electric installation works such as interconnection of strings, connection of string combiner boxes, AC/DC Cables, power evacuation infrastructure shall carry warranty for 12 months.

**C. Conditions of Warranty:**

- i. Claims arising from or in connection with this warranty must be filed in writing within the applicable warranty period. No extension of warranty period shall be provided.
- ii. Until the end of the warranty period, the Contractor shall have an access right to all parts of the plant, reports on its working and output.
- iii. The Customer shall be responsible to ascertain any warranty claims directly with the original manufacturer as per the limited warranty certificate from original manufacturer.
- iv. However if the contractor has been contracted for operation and maintenance services, then under the contract period, the Contractor shall liaise between the Customer and original equipment manufacturer for valid warranty claims.

**D. Disclaimer:**

These warranties are valid for normal use and only under normal operating conditions. The warranties assume that the performance of the system has not been reduced by actions or events outside the sphere of influence of the Contractor, in particular:

- i. Failure by the Owner of the Payment Terms
- ii. Modifications(without approval of contractor)/damage as a consequence of force majeure (storms, hail, fire, power outage, lightning, flood, snow damage, avalanches, frost, earthquakes, tornadoes, volcanic eruptions, landslides, plaques of insects and other detrimental effects by animals, high speed winds, acts of war etc.) or damage caused by third parties due to vandalism or theft
- iii. Unprofessional operation, improper removal and/or re-installation of modules, willful damage or negligence, , improper installation and /or maintenance by final customer or a third party, misuse or abuse of equipment, modifications or alterations made by customer or a third party without consent from the contractor
- iv. Impairment due to external influences (e.g.: dirt, smoke, salt, chemicals and other impurities)
- v. Warranty cannot be transferred to a third party without prior consent from the Contractor.
- vi. Each of the parties shall not disclose the terms hereof to any person/ party. Provided however, either party may disclose the existence of the transaction to its



legal counsel, accountants, lenders, engineers, architects, interior designers, investors, vendors, suppliers and other persons who need to be aware of the existence of the transaction. Further, either party may disclose the existence of the transaction to the extent that law or court order requires such disclosure, but in such case the other party must be first provided with a written notice thereof.

- vii. This PO shall be governed by the Indian Laws and rules as amended from time to time. The Courts of Alwar shall have exclusive jurisdiction in all matters arising under this PO.

**E. Warranty Claims:**

- i. In case of a warranty claim, the Contractor shall mediate and co-ordinate with original manufacturers for replacement of components with functional ones, as per the limited warranty conditions of the original manufacturer and or the warranty terms promised by the Contractor.
- ii. No other claim shall be derived from this warranty.
- iii. For components newly supplied or repaired during warranty period, only remaining time of original warranty shall be applicable

**F. Exclusions:**

- i. Obstructions. This Performance calculation methodology shall not be applicable if in the event that the Solar Facility becomes obstructed in any way after installation by structure, plants, airborne debris, or other objects reducing the amount of solar irradiation reaching the Solar Facility modules.
- ii. Output Losses. Any output loss caused by Owner's utility, including without limitations, brownouts and blackouts, or by the Owner's building electrical system or portions thereof.
- iii. Force Majeure. Any Warranty shall be nullified if Solar Facility output is compromised by events beyond Soleden's reasonable control, including but not limited to, acts of God, war, civil unrest, labor disputes, unusual weather conditions, fire, flood, earthquake or other casualty, or government regulation or restriction.
- iv. Vandalism/Theft. The Performance Warranty shall be nullified (for any period affected) if Solar Facility production is compromised by vandalism, damage and/or theft of equipment.
- v. Soleden's Site Access and Maintenance. This Warranty shall be nullified if Soleden and or any subcontractor selected and approved by Soleden is denied reasonable access to the Solar System for the purposed of supporting this Performance Warranty. This Performance Warranty is conditioned upon Soleden accessing and maintaining the Solar System for the Performance Warranty period and may not be transferred or assigned without written consent of Soleden.



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- vi. The foregoing list of adverse events and circumstances is merely exemplary and Soleden shall not be excluded from invoking similar events out of Soleden control and responsibility that may have a negative impact on the actual energy production from the Solar Facility.
- vii. Loss of unit generation or damage to solar modules due to smoke in the air or premises. Soleden is not responsible in this case.

