

### Solar power is the last energy resource that isn't owned yet - Nobody taxes the sun yet -- Bonnie Rait

# ROOFTOP SOLAR ENERGY SYSTEM A COMPLETE ENERGY SOLUTIONS

### Content

### Company

### **Products**

### Projects

### **Company Description**

Our vision and mind are focused on the endless application of solar energy. In the year 2022, our respected Chairman, Mr. C.C. William Verghese, opted for a group of like-minded people to join hands with the institution for maximum utilization of the new generation energy resource – Solar Power. For that he has brought an array of young, professional, energetic and most experienced technical experts.

Even after 4 decades, each and every customer do rely on our services and contributions. Our motto is to come in the list of top-rated distributors of Solar Panels and inverters. Thereafter, we are concentrating on the materialization of innovative projects regarding the so-called: "Future Energy Resource – Solar Power".

Now we have become one among the major and known quality-maintained distributors of South India. We have tie-ups with adequate internationally known companies to maintain and increase the quality of our solar-grid products.

#### **Solar Module and Energy Solutions**

- The group is committed to providing world class & innovative
   Services and Products across a range of businesses
- Polycrytalline & Mono-Perc Half-Cut Solar Panels
- Skilled & Experienced Engineers
- Experienced Technicians and High-Quality Work
- 2 MW of EPC Integration capacity by the end of 2023

#### **Energy Business**

- Development and construction of utility-scale solar Plants /Projects
- Total Projects in Pipeline: 1 MW
- Ongoing Projects: 250 KW

# **Leading Solar Company in KERALA**

- SML Solar is one of the leading Solar Company in Kerala
- We have completed total 500KW Projects in the year, 2023
- Total Projects in Pipeline: 1 MW
- Ongoing Projects: 250 KW
- Many of our customers have been able to reduce their monthly bills by 95%
- Convert your Petrol or Diesel Cars into an Electric Vehicle to reduced fuel expenses
- Replacing cooking gas with electric induction cooktop is safer and more efficient
- Grid-Connected Systems are affordable and easy to maintain. No need for using battery

#### **1 MW of Solar Project Pipeline; 250 KW Ongoing Projects**

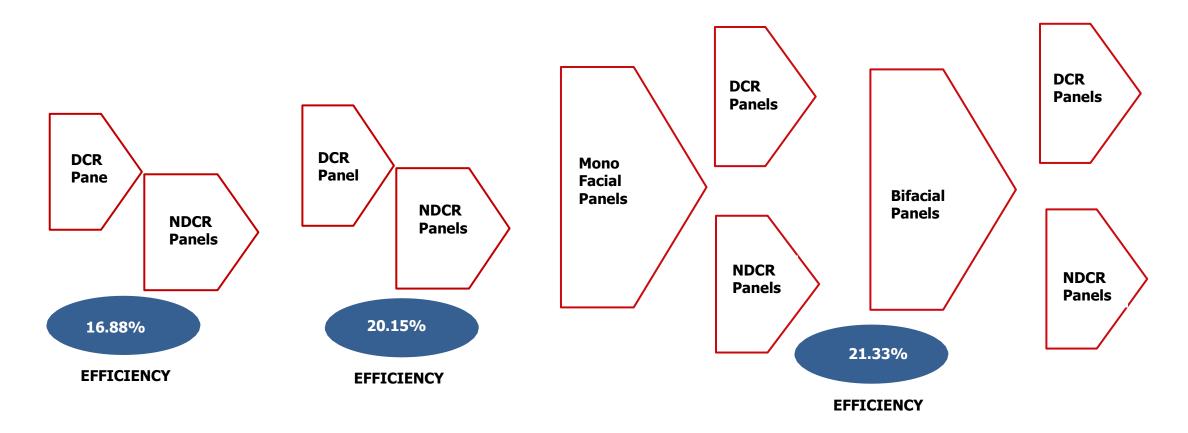


### Company

### **Products**

Projects

### **Cell and Module Technology Roadmap**



Poly Crystalline & Mono Crystalline

Mono PERC Half Cut

## **Poly Crystalline Solar Panels**

#### **Poly Crystalline Panel**

Module Wattage	330W
Module Efficiency	<b>16.88%</b>
Module Dimensions	1985× 1000 × 35mm



- Module Wattage-330Wp, Module Efficiency up to 16.88%
- Industry leading warranty: 10 Years Product Warranty & 25 Years Linear Power Warranty
- Cells Specifications (Number, Size): 72 Cells, 157mm X 157mm
- Lower temperature coefficient (Pmax): -0.4080%/ °C

## **Mono-Crystalline Solar Panels**

#### **Mono-Crystalline Panel**

Module Wattage	Up to <b>390W</b>
Module Efficiency	Up to <b>20.15%</b>
Module Size	1985 × 1000 × 35mm



- Module Wattage-390Wp, Module Efficiency up to 20.15%
- Industry leading warranty: 10 Years Product Warranty & 25 Years Linear Power Warranty
- Cells Specifications (Number, Size): 72 Cells, 158.75mm X 158.75mm
- Lower temperature coefficient (Pmax): -0.4080%/ °C

<b>Mono-Perc Half Cut Solar Panel</b>			
	Mono-Perc H	lalf Cut Panel	
	Module Wattage	Up to <b>545W</b>	
	Module Efficiency	Up to <b>22%</b>	
	Module Size	2274 × 1134 × 35mm	

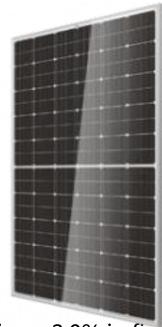
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- Module Wattage-545Wp, Module Efficiency up to 21.33%
- Industry leading warranty: 12-year performance warranty, Linear Power Warranty for 27 years with 2% for 1<sup>st</sup> year degradation and 0.55% from year 2 to year
- Cells Specifications: M10 144 Cells
- Lower temperature coefficient(Pmax): -0.35%/ °C

## **Mono-Perc Half Cut Bifacial Solar Panel**

### **Mono-Perc Half Cut Panel**

Module Wattage	Up to <b>545W</b>
Module Efficiency	Up to <b>22%</b>
	·
Module Size	2266 × 1133 × 35mm



- Module Wattage-545Wp, Module Efficiency up to 21.33%
- Industry leading warranty: 12-year performance warranty, Power Degradation <2.0% in first year <0.45%/year in 2-30 Years</li>
- Cells Specifications: M10 144 Half-cut mono-crystalline P-type PERC bifacial solar cells; Multi bus bar

## **On-Grid Inverters**

# **KSOLARE Inverters**

Inverter Capacity	Up to <b>2-250kW</b>
Conversion Efficiency	Up to <b>98.7%</b>
Standard Warranty	8 Years

- Inverter power up to 250kW, Conversion efficiency up to 98.7%
- Standard Warranty: 8-Year Standard Warranty





# **SCIFAR**

# **SOFAR Inverters**

Inverter Capacity	Up to <b>3 – 250KW</b>
Inverter Efficiency	Up to <b>97.7%</b>
Standard Warranty	8 Years

- Inverter power up to 250kW, Conversion efficiency up to 98.7%
- Standard Warranty: 8-Year Standard Warranty
- Warranty is extendable upto 15 Years

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# **International Quality Certificates**

Approvals & Certifications for Panels	Approvals & Certifications for Inverter
<ul> <li>IEC 61215 Ed2, IEC 61730, IEC 61701, UL 61730, MCS, JET, CEC, CEC-Aus, IEC 62716, IEC 62782, IEC 60068-2-68, IEC 61853, BIS,</li> <li>ALMM Listed</li> <li>CE conformity</li> <li>Image: Image: Imag</li></ul>	<ul> <li>EMC: EN 61000-6-1, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3</li> <li>Safety Standards: IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109-1/2</li> <li>Grid Standards: AS 4777, VDE V 0124-100, VDE V 0126-1-1, VDE-AR-N 4105, G83/2, C10/11, RD 1699</li> </ul>

### **Module Warranty**

#### **Poly Crystalline modules**



Linear power output warranty

#### Mono Perc Half Cut / Bifacial modules





Product warranty on materials and workmanship



Product warranty on materials and workmanship

\*Please refer to the warranty statements of Solar Panels for more details.

### **Inverter Warranty**

### SOFAR INVERTER SCFAR



Standard Warranty

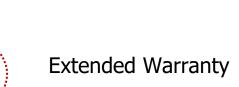
8

year



Upto 15

Standard Warranty



\*Please refer to the warranty statements of Inverter for more details.

# **Solar Inverter Advantages**



# Higher Efficiency, compatible for high power modules

- DC/AC Ratio up to 1.5
- Efficiency up to 98.1%
- Europe efficiency 97.5%
- High string DC input current 12.5A



### **Higher reliability, suitable for** various environmental conditions

- Integrated IGBT module, less components and higher reliability
- IP 65, better waterproof
- With LED indicator lights, more durable than LCD screen
- High quality components from leading suppliers

# **Solar Inverter Advantages**



### **Easy installation and O&M**

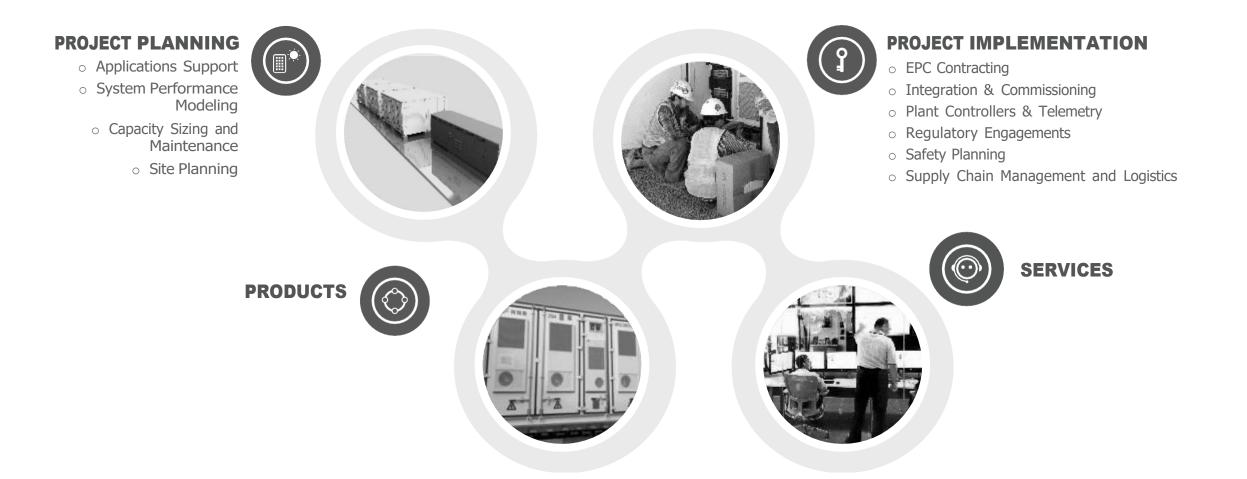


#### **Better safety performance**

- Simple bracket design
- Light weight
- One-click configuration
- Local mode, remote control and upgrade
- Real-time monitoring with Cloud platform
- Combined wiring box design, reduce installation time

- DC reverse alarm function
- Leakage current suppression technology
- ・Overvoltage Class, II(DC), III(AC)
- SPD protection Type II (DC Box Version, DC side

# **SOLAR PROJECT PLANNING**



### Content

### Company

### **Products**

**Projects** 





#### **BRD Thaloor, Thrissur, Kerala**

Capacity: 175 KW Module : ADANI Mono Perc Half Cut Inverter : SOFAR 60 KW-3Nos

### BRD Vazhakkod, Thrissur, Kerala

Capacity: 40 KW Module: ADANI Mono Perc Half Cut Inverter: GoodWe 36 kW



#### **BRD** Irinjalakkuda, Thrissur, Kerala

Capacity: 30 KW Module : ADANI Mono Perc Half Cut Inverter : EVVO



#### Ayurbethania Hospital, Thrissur, Kerala

Capacity: 56 KW Module : ADANI Mono Perc Half Cut Inverter : EVVO & SOFAR



#### Penco Marbles, Thrissur, Kerala

Capacity: 20 KW Module : ADANI Mono Perc Half Cut Inverter : KSOLARE



#### Casa Allay Home Stay, Ernakulam, Kerala

Capacity: 10K KW Module : RAYZON Mono Perc Half Cut Inverter: KSOLARE



#### Castillo Inn Home Stay, Ernakulam, Kerala

Capacity: 16 KW Module : RAYZON Mono Perc Half Cut Inverter : KSOALRE



#### Mr. Shibu, Thrissur, Kerala

Capacity: 20 KW Module : VIKRAM Mono-Perc Half Cut Inverter : SOFAR



#### Chiriyankandath Jewellery, Thrissur, Kerala

Capacity: 10 KW Module : ADANI Mono Perc Half Cut Inverter: ENPHASE



### Mrs. Rekha Rajesh, Ernakulam, Kerala

Capacity: 10 KW Module : Pixon Poly Inverter : KSOLARE

## **Solar Plants Installed by SML Solar**



#### Mrs. Lalitha, Ernakulam, Kerala

Capacity: 10 KW Module : VIKRAM Mono Perc Half Cut Inverter : SOFAR



#### Mr. Jayachandran, Alappuzha, Kerala

Capacity: 10 KW Module : ADANI Mono Perc Half Cut Inverter : EVVO

# **THANK YOU!**

Year. 2023