

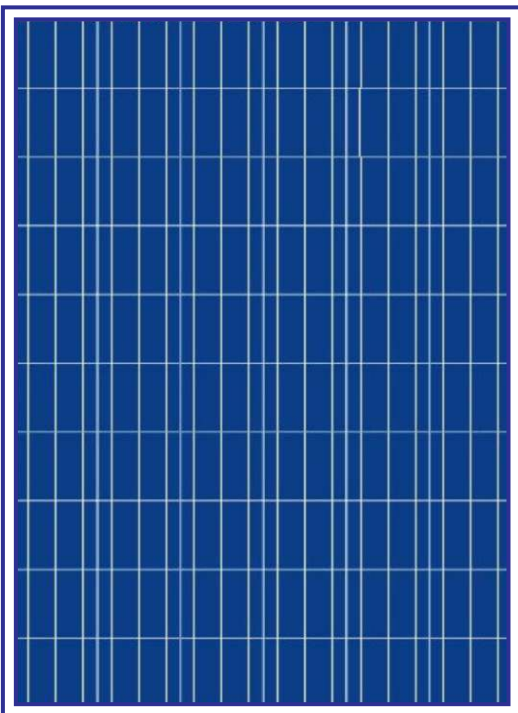


# SONALI SOLAR

"Energy Inspired by Nature"

LEADING MANUFACTURER OF PV MODULES

230 to 250 Series



#### Quality Product

All Manufactured modules are tested 100% by EL ( Electroluminescence ) during the Production Process & Free from micro cracks.

Our high-performance modules are highly efficient, reliable and provide optimal output. The company manufactures solar modules in compliance with global standard including MNRE, IEC 61215, 61730-1, 61730-2, 61701, UL 1703, ISO 9001:2008 & ISO 14001:2008 & 18001:2007.

#### High Efficiency

High Module efficiency is obtaining top performance even in diffused light conditions. We are leaders in providing our customers with maximum sunlight conversion.

#### Application Possibilities

Residential and Commercial rooftops, Car ports, Solar Farming, Balconies, Awnings, Street lights, Fences, and Canopies.

#### Our Team

We have a team of qualified experts and engineers making sure that modules produce maximum power. We pride ourselves in caring for each individual customer needs with detailed attention. Our end goal is to give a highly efficient product with exceptional customer service.

#### Guarantee

Our product is durable and has 25 years performance warranty. Integrated manufacturing of cells & modules in one production line guarantees optimum performance.

#### RFID

RFID is an Radio Frequency Identification Technology - enables every individual modules to be uniquely identified. We can provide RFID tag as per customer's request.



An ISO 9001 : 2008 Certified  
An ISO 18001 : 2007 Certified  
An ISO 14001 : 2004 Certified

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## Electrical Specifications

Nominal Maximum Power (Pmax)	230W	240W	250W
Optimum Operating Voltage (Vmp)	30	30.60	31.32
Optimum Operating Current (Imp)	7.67	7.84	7.98
Open Circuit Voltage (Voc)	36	36.6	37.2
Short Circuit Current (Isc)	8.1	8.3	8.45

\* Maximum System Voltage : 1000 V

\* Measurement Power Tolerance on Power  $\pm 3\%$ , 0/+ Tolerance on Max power Available upon request.

\* Under Standard Test Conditions (STC) of irradiance of 1000W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25 °C

\* Normal Operating cell Temperature (NOCT) 47 $\pm$  2° C

## Mechanical Specification

<b>Module Dimensions</b>	<b>(1640 X 981 X 40 mm) / (64.57 X 38.62 X 1.57 inch)</b>		
Weight	19kgs / 41.89lbs		
Junction Box	Protection Class IP65 with Bypass diodes		
Cable & Connectors	Solar Cable 900mm length with 4.0mm <sup>2</sup> double Insulated Cable, Multi Contact connector		
Cell Arrangement	60 (6 X 10)		
Front Cover	3.2mm Tempered Glass		
Encapsulate	EVA		
Back Cover	Composite Sheet		
Frame	Silver Matt Finished Anodized frame, Anodizing Coating Thickness $\geq 16 \mu\text{m}$		

Temperature Coefficients		Product Guarantees	
Coefficient of Current $\alpha$	(0.060 %/°C)	Product Warranty	10 Years
Coefficient of Voltage $\beta$	(-0.35 %/°C)	Performance Warranty	First 10 Years up to 90%, next 15 years up to 80%
Coefficient of Power $\lambda$	(-0.45%/°C)	Approvals & Certificates	Complied to IEC 61215, 61730-1, 61730-2 & 61701 UL 1703 Standards by ETL

Tested Operating Conditions:	
Temperature Cycling Range	(-40°C~+85°C)
humidity Freeze, Damp Heat	85 % RH

