



香港太陽能集團有限公司  
Hong Kong Solar Group Co.,Ltd.

## Hong Kong Solar Polycrystalline Solar Module

### HKS 190W



**72 CELL**

Poly Crystalline Module

**15.35%**

Maximum Efficiency

**190W**

Power Output Range

**0/+5%**

Positive Power Tolerance



### Function Features



#### PID Resistant

Advanced cell technology and qualified materials lead to high resistance to PID.



#### High Efficiency

High module conversion efficiency (up to 15.35%), through innovative manufacturing technology.



#### Severe Weather Resilience

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



#### Low-light Performance

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments.



#### Higher Quality Assurance

100% EL test before and after lamination, and finished products EL test, providing higher quality assurance.



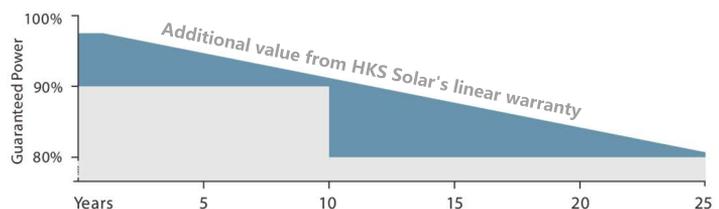
#### Maximized Energy Harvest

Impedance matching technology eliminates mismatch losses, more power from each module bin.

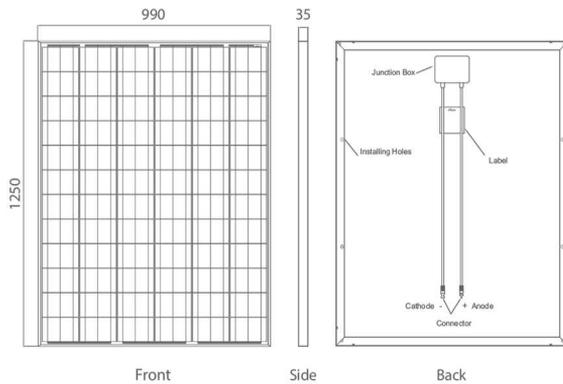
### LINEAR PERFORMANCE WARRANTY

10-Year Product Warranty

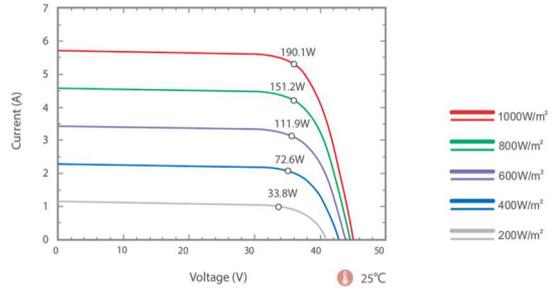
25-Year Linear Power Warranty



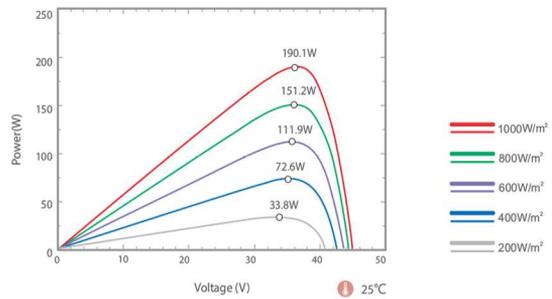
## Engineering Drawings



## Current-Voltage Curves



## Power-Voltage Curves



## Packaging Configuration

( Two boxes=One pallet )

30pcs/box, 60pcs/pallet, 1080pcs/40'GP Container

## Technical Specifications

Model	HKS 190W	
<b>Electrical Characteristics</b>		
	<b>STC</b>	<b>NOCT</b>
Maximum Power (Pmax)	190Wp	140Wp
Maximum Power Voltage (Vmpp)	36.0V	33.3V
Maximum Power Current (Impp)	5.28A	4.20A
Open Circuit Voltage (Voc)	45.0V	42.4V
Short Circuit Current (Isc)	5.70A	4.59A
Power Tolerance(Positive)	5%	
Module Efficiency STC	15.35%	
Operating Temperature Range	-40°C to +85°C	
Maximum System Voltage	1000V	
Series Fuse Rating	15A	
Temperature Coefficient of Pmax	-0.44 %/°C	
Temperature Coefficient of Voc	-0.33 %/°C	
Temperature Coefficient of Isc	0.055 %/°C	
Nominal Operating Cell Temperature(NOCT)	45±2°C	
<b>Mechanical Characteristics</b>		
Cell Type	Polycrystalline 156x156 mm	
Cell Number	72 (6x12)	
Dimensions (mm)	990x1250x35	
Weight(Kgs)	13.40	
Front Glass	3.2 mm, High Transmission, Low Iron, Tempered Glass	
Frame Type	Anodized Aluminium Alloy	
Junction Box Protection Class	IP 67 Rated	
Connector Type	MC4	
Output Cables	2.5 mm <sup>2</sup> , Length:900 mm	

STC: Irradiance 1000W/m<sup>2</sup>

Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m<sup>2</sup>

Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s