

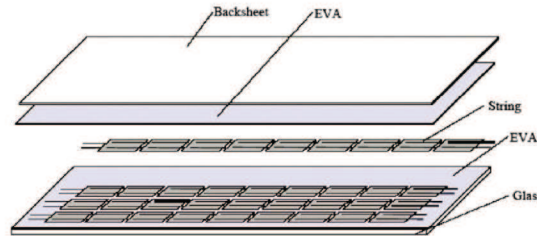
# HSE 60P

P156x156

High-Performance 60 Cell Poly crystalline  
156x156mm  
Solar Photovoltaic Module  
**230W**  
**265W**

We focus on precise production and provide Customer with best cost-effective products to create Market Value for Customer

## HSE 60P 230W/235W/240W/245W/250W/255W/260W/265W



- Power tolerance ( 0~+3%) to ensure the high reliability of power output
- Special PV Module Insurances by world leading insurance company guarantees the benefit of PV investors and PV module users
- Junction box and bypass diodes guarantee the modules free of overheating and "hot spot effect"

### Guaranteed Performance\*\*

**12** Years Manufacturing Warranty

**12** Years Warranty 90% Power Output

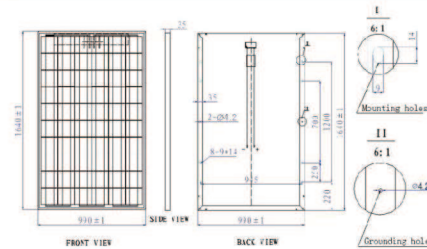
**25** Years Warranty 80% Power Output

Free module recycling through membership in the Ceres Cycle Association

### Choosing HELIOS Solar

- The most vertically integrated solar manufacturer in the industry with production modules using both mono crystalline and multi crystalline technology.
- Global distribution with local warehousing, delivery and after sales services.
- Most updated design with drainage holes in the frame ensures the modules to withstand various weather conditions.
- Minimal wiring effort required as the module has high reverse current resistance.

### MECHANICAL DRAWINGS



### MECHANICAL SPECIFICATION

Cell Type	Poly Crystalline 156x156mm
Number of cells	60(6x10)
Dimensions (AxBxC)	1640x990x35mm
Weights	19kg
Front Glass	3.2mm tempered low iron glass
Frame	Anodized aluminum
Junction Box	IP 65, with bypass diodes
Connector	MC4 compatible
Output Cables	TUV, ± length 900mm, 4.0mm²

### ELECTRICAL CHARACTERISTICS

	230W	235W	240W	245W	250W	255W	260W	265W
Maximum Power at STC(Pmax)	230W	235W	240W	245W	250W	255W	260W	265W
Short Circuit Current(Isc)	8.6A	8.43A	8.57A	8.63A	8.71A	8.80A	8.89A	8.94A
Open Circuit Voltage(Voc)	36.2V	35.6V	35.7V	36.1V	36.3V	36.4V	36.7V	37.0V
Maximum Power Current(Imp)	7.9A	7.88A	8.00A	8.05A	8.17A	8.30A	8.42A	8.54A
Maximum Power Voltage(Vmpp)	29.1V	29.8V	30.0V	30.4V	30.6V	30.7V	30.9V	31.0V
Module Efficiency	14.17%	14.47%	14.78%	15.09%	15.40%	15.71%	16.01%	16.32%
Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%

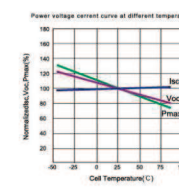
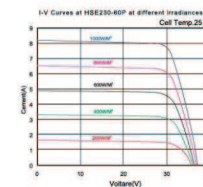
STC: irradiance 1000W/m² Module temperature 25°C AM=1.5

### TEMPERATURE CHARACTERISTICS

Normal Operating Cell Temperature (NOCT)	45°C ± 2°C
Temperature Coefficient of Pmax	-0.44% / °C
Temperature Coefficient of Voc	-0.34% / °C
Temperature Coefficient of Isc	0.06% / °C

### PACKING CONFIGURATION

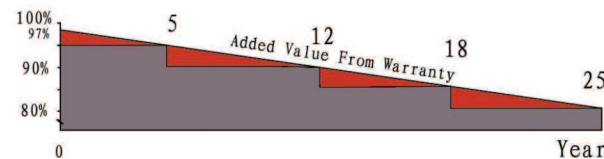
Container	20'GP	40'GP
Pieces per pallet	30	30
Pallets per container	14	28
Pieces per container	400	840



### SYSTEM INTEGRATION PARAMETERS

Maximum system voltage	VDC 1000V
Maximum Series Fuse	15A
Increased snowload acc. to IEC 61215	5400Pa
Operating Temperature	-40to+85°C
Number of bypass diodes	3 or 6

### INDUSTRY-LEADING WARRANTY BASED ON NOMINAL POWER



- Based on nominal power(pnom)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80%
- 12-year material and workmanship