

# SM-250PC8 60 cell-series Polycrystalline PV Module

S-ENERGY

## 235 ~ 250 Watt

### New story creator, S-Energy

As the first company for PV industry in Korea, S-Energy has always been marking its name in every milestone of Korean PV history. Since 1991, we have been manufacturing PV modules and providing system integration service to our customers, and now we are proud to boast our worldwide recognition based on unbeatable quality standards and reliability. S-Energy's PC8 series is designed with our accumulated experience and cutting edge technology, and it will be the perfect choice for you which can be used in any environment and any installation conditions.

## Features



### Positive tolerance

0~+5W positive power sorting



### Mechanical load

8,400 Pa (857kg/m<sup>2</sup>)  
(IEC Standards: 245kg/m<sup>2</sup>)



### Hail impact test

30.7m/s speed ball  
(IEC Standards: 23m/s)



### Ammonia corrosion resistance test

Applicable in agricultural  
and stock breeding environment



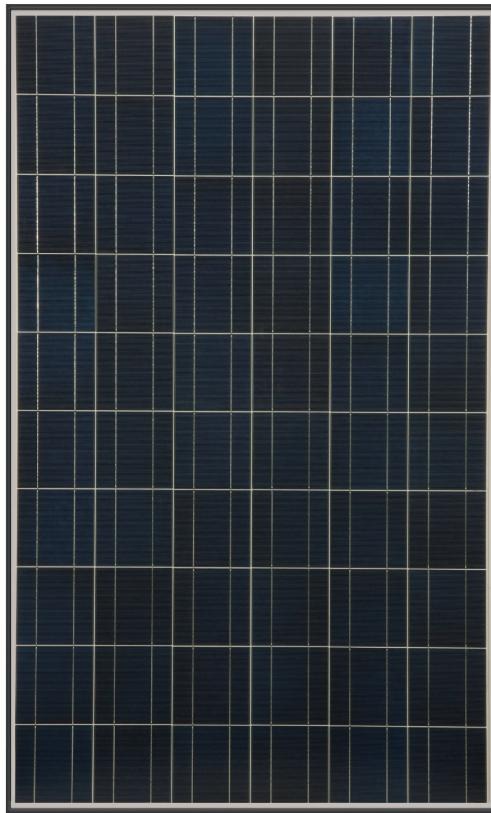
### Salt mist corrosion test

Applicable in marine environment



### Linear warranty

Max annual power decline 0.7%



## Qualifications & Certifications

IEC 61215 & 61730, CE, UL1703, MCS,  
ISO 9001, ISO 14001, OHSAS 18001, PV Cycle



## Mechanical Characteristics

Solar cell	Polycrystalline 156mm x 156mm (6 inches)
No. of cells	60 cells 6 x 10 matrix
Dimensions	1665mm x 999mm x 50mm
Weight	20 kg (44.09 lbs)
Front glass	3.2mm High-transmittance low iron tempered glass
Frame	Anodized aluminum silver frame Option : black color / rail type
Output cables	RHW-2, 12AWG (4mm <sup>2</sup> ) / Cable length:1000mm
Connectors	MC4 connectable

## Warranty

Product warranty	10 years limited product warranty
	1 <sup>st</sup> year minimum peak power output : 97%
Performance warranty	2 <sup>nd</sup> year to 24 <sup>th</sup> year peak power output : max annual power decline 0.7%
	25 years peak power output : 80.2%

# SM-250PC8 60 cell-series

## Polycrystalline PV Module

### Electrical Characteristics

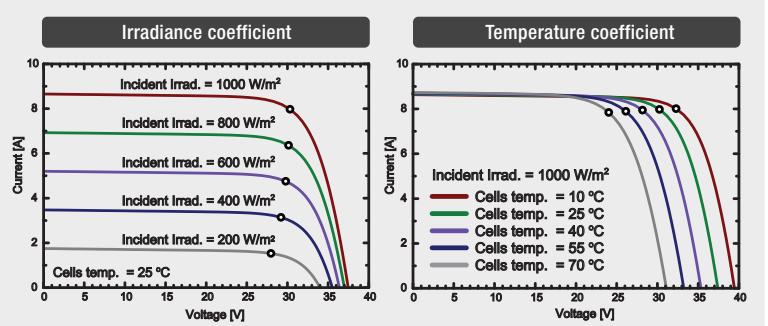
STC (Irradiance 1000W/m <sup>2</sup> , module temperature 25°C, AM=1.5)	SM-235PC8	SM-240PC8	SM-245PC8	SM-250PC8
Rated power (P <sub>max</sub> )	235W	240W	245W	250W
Voltage at P <sub>max</sub> (V <sub>mp</sub> )	29.8V	30.0V	30.4V	30.8V
Current at P <sub>max</sub> (I <sub>mp</sub> )	7.89A	8.02A	8.08A	8.14A
Warranted minimum P <sub>max</sub>	235W	240W	245W	250W
Short-circuit current (I <sub>sc</sub> )	8.51A	8.58A	8.63A	8.67A
Open-circuit voltage (V <sub>oc</sub> )	37.1V	37.3V	37.4V	37.5V
Module efficiency	14.12%	14.42%	14.72%	15.03%
Operating module temperature	-40°C to + 85°C			
Maximum system voltage	600VDC (UL) / 1000VDC (IEC)			
Maximum series fuse rating	15A			
Maximum reverse current	20.25A			
Power tolerance	0 ~ +5 W			

### Temperature Characteristics

Temperature coefficient of I <sub>sc</sub>	0.052%/°C
Temperature coefficient of V <sub>oc</sub>	-0.312%/°C
Temperature coefficient of power	-0.429%/°C
NOCT (Air 20 °C; Sun 0.8kW/m <sup>2</sup> ; Wind 1m/s)	45±3 °C

### Packing Configuration

Container	40' H/C
Modules per pallet	19 pcs
Pallets per container	26 pallets
Modules per container	494 pcs



### Remarks :

Pmax measurement tolerance : ±3%

S-Energy uses triple A class simulator.

Specification subject to change without prior notice. S-Energy reserves the rights of final interpretation.

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