

# HYUNDAI SOLAR MODULE

**HI**  
SERIES

## Mono-Crystalline Type

HiA-S360HI    HiA-S365HI    HiA-S370HI    HiA-S375HI  
HiA-S380HI    HiA-S385HI

144

Cells



For commercial  
& Utility  
Applications



UL 1,500V  
IEC 1,500V  
Saves BOS Costs



More Power  
Generation  
In Low Light



### PERL Technology

PERL technology provides ultra-high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



### Anti-LID / PID

Both LID(Light Induced Degradation) and PID(Potential Induced Degradation) are strictly eliminated to ensure higher actual yield during lifetime.



### Mechanical Strength

Tempered glass and reinforced frame design withstand rigorous weather conditions such as heavy snow and strong wind.



### Reliable Warranty

Global brand with powerful financial strength provide reliable 25-year warranty.



### Corrosion Resistant

Various tests under harsh environmental conditions such as ammonia and salt-mist passed.



### UL / VDE Test Labs

Hyundai's R&D center is an accredited test laboratory of both UL and VDE.

## Hyundai's Warranty Provisions



10  
YEARS

- 10-Year Product Warranty
- On materials and workmanship



25  
YEARS

- 25-Year Performance Warranty
- Initial year: 97%
- Linear warranty after second year: with 0.7%p annual degradation, 80% is guaranteed up to 25 years

## About Hyundai Energy Solutions

Established in 1972, Hyundai Heavy Industries Group is one of the most trusted names in the heavy industries sector and is a Fortune 500 company. As a global leader and innovator, Hyundai Heavy Industries is committed to building a future growth engine by developing and investing heavily in the field of renewable energy.

As a core energy business entity of HHI, Hyundai Energy Solutions has strong pride in providing high-quality PV products to more than 3,000 customers worldwide.

## Certification



- IEC 61215 and IEC 61730 New Standard by TUV SUD
- UL 1703 Listed by UL, Type 1(for Fire Class A)

**HYUNDAI**  
ENERGY SOLUTIONS

## Electrical Characteristics

		Mono-Crystalline Type(HiA-S____HI)					
		360	365	370	375	380	385
Nominal Output (P <sub>mpp</sub> )	W	360	365	370	375	380	385
Open Circuit Voltage (V <sub>oc</sub> )	V	47.01	47.21	47.40	47.61	47.80	48.00
Short Circuit Current (I <sub>sc</sub> )	A	9.69	9.77	9.85	9.93	10.01	10.08
Voltage at P <sub>max</sub> (V <sub>mpp</sub> )	V	39.20	39.39	39.60	39.81	40.02	40.21
Current at P <sub>max</sub> (I <sub>mpp</sub> )	A	9.18	9.27	9.35	9.43	9.50	9.58
Module Efficiency	%	18.10	18.40	18.65	18.90	19.15	19.40
Cell Type	-	mono-crystalline silicon					
Maximum System Voltage	V	1,500					
Output Power Tolerance	%	-0/+3					
Temperature Coefficient of P <sub>max</sub>	%/K	-0.36					
Temperature Coefficient of V <sub>oc</sub>	%/K	-0.30					
Temperature Coefficient of I <sub>sc</sub>	%/K	+0.038					

\*All data at STC (Standard Test Conditions). Above data may be changed without prior notice.

## Mechanical Characteristics

Dimensions	992 mm (39.06")(W) x 2,000 mm (78.74")(L) x 40 mm (1.57")(H)
Weight	Approx. 22.6 kg (49.8 lbs)
Solar Cells	144 half cells (2 parallel x 72 half cells in series)
Output Cables	4 mm <sup>2</sup> (12AWG) cables with polarized weatherproof connectors, IEC certified (UL listed and UL 4703 certified), Length 1.2 m (47")
Junction Box	IP68, weatherproof, IEC certified (UL listed)
Bypass Diodes	3 bypass diodes to prevent power decrease by partial shade
Construction	Front : Anti-reflection coated glass Encapsulant : EVA   Back Sheet : Weatherproof film
Frame	Clear anodized aluminum alloy type 6063

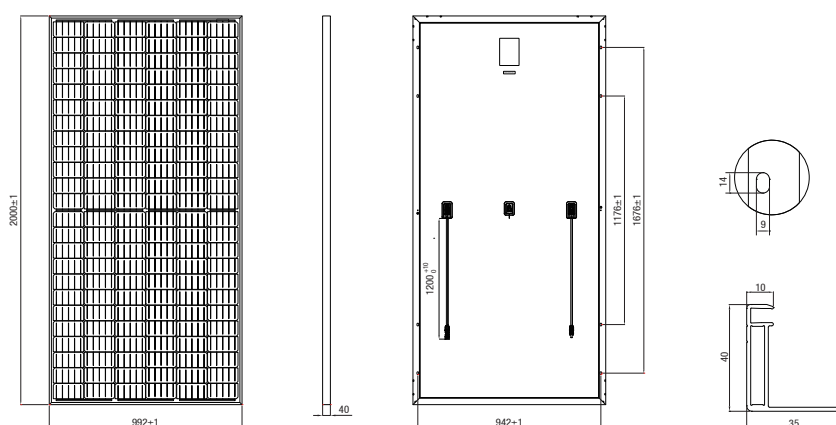
## Installation Safety Guide

- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

Nominal Operating Cell Temperature	45°C ± 2
Operating Temperature	-40 – 85°C
Maximum System Voltage	DC 1,500V
Maximum Reverse Current	20A
Maximum Test Load	Front 113 psf (5,400 Pa) Rear 50 psf (2,400 Pa)

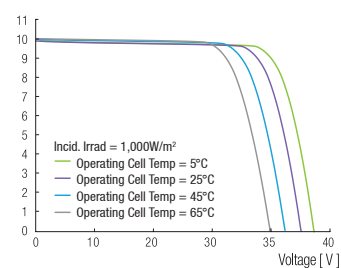
## Module Diagram (unit : mm)

Mono-Crystalline  
Si Type-Front Side View



## I-V Curves

Current [A]



Current [A]

