HYUNDAI SOLAR MODULE



Multi-Crystalline Type

HIS-M250WG HIS-M255WG HIS-M260WG HIS-M265WG

Mono-Crystalline Type

HiS-S275WG HiS-S280WG HiS-S285WG HiS-S290WG HiS-S295WG





For Both Residential & Commercial **Applications**



Strong Moisture Resistance



Heavy-Duty For Desert



Hyundai Cell, Made in Korea





PERL Technology

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



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-Year Product Warranty
- · On materials and workmanship



- 25-Year Performance Warranty
- · 90% of guaranteed min. power for 10 years
- · 80% of guaranteed min. power for 25 years

About Hyundai Solar

Established in 1972, Hyundai Heavy Industries (HHI) is one of the most trusted names in the heavy industries sector with 48,000 employees and more than 40 Billion USD in annual sales (2015). 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.

Started as a core business division of HHI, Hyundai Solar (Hyundai Heavy Industries Green Energy) now stands as an independent company and an affiliate of HHI as from December 2016. It is the largest and the longest standing PV cell and module manufacturer in South Korea with 800 MW of module production capacity. We have strong pride in providing high-quality solar PV products to more than 3 000 customers worldwide

Certification



















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| Electrical Characteristics | | Mult | i-Crystalline | Type(HiS-M_ | WG) | Mono-Crystalline Type(HiS-SWG) | | | | |
|-----------------------------------|-----|-------------------------------|---------------|-------------|------|--------------------------------|------|------|------|------|
| | | 250 | 255 | 260 | 265 | 275 | 280 | 285 | 290 | 295 |
| Nominal Output (Pmpp) | W | 250 | 255 | 260 | 265 | 275 | 280 | 285 | 290 | 295 |
| Open Circuit Voltage (Voc) | ٧ | 37.4 | 37.6 | 37.7 | 37.9 | 38.4 | 38.5 | 38.7 | 38.8 | 39.0 |
| Short Circuit Current (Isc) | А | 8.7 | 8.8 | 8.9 | 9.1 | 9.3 | 9.4 | 9.5 | 9.7 | 9.8 |
| Voltage at Pmax (Vmpp) | ٧ | 30.9 | 31.0 | 31.1 | 31.3 | 31.6 | 31.7 | 31.8 | 32.0 | 32.1 |
| Current at Pmax (Impp) | А | 8.1 | 8.2 | 8.4 | 8.5 | 8.7 | 8.8 | 8.9 | 9.1 | 9.2 |
| Module Efficiency | % | 15.3 | 15.6 | 15.9 | 16.2 | 16.8 | 17.1 | 17.4 | 17.7 | 18.0 |
| Cell Type | - | 6", multi-crystalline silicon | | | | 6", mono-crystalline silicon | | | | |
| Maximum System Voltage | ٧ | 1,000 | | | | 1,000 | | | | |
| Temperature Coefficient of Pmax | %/K | -0.41 | | | | -0.42 | | | | |
| Temperature Coefficient of Voc | %/K | -0.32 | | | | -0.30 | | | | |
| Temperature Coefficient of Isc | %/K | 0.039 | | | | 0.047 | | | | |

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

Mechanical Characteristics

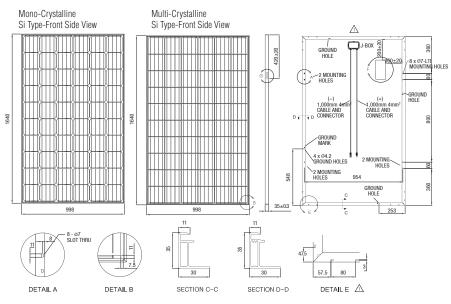
| Dimensions | 998mm(39.29")(W) × 1,640mm(64.57")(L) × 35mm(1.38")(H) | | | |
|---------------|---|--|--|--|
| Weight | Approx. 18.7kg(41.2 lbs) | | | |
| Solar Cells | 60 cells in series (6 × 10 matrix) (Hyundai cell, Made in Korea) | | | |
| Output Cables | 4 mm² (12AWG) cables with polarized weatherproof connectors, IEC certified (UL listed), Length 1.0 m (39.4") | | | |
| Junction Box | IP68, weatherproof, IEC certified (UL listed) | | | |
| Bypass Diodes | 3 bypass diodes to prevent power decrease by partial shade | | | |
| Construction | Front : High transmission low-iron glass, 2.8 mm (0.11") Encapsulant : Olefin Back Sheet : Weatherproof film | | | |
| Frame | Clear anodized aluminum alloy type 6063 | | | |

Installation Safety Guide

- Only qualified personnel should install or perform maintenance.
- \bullet 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 | 46°C ± 2 |
|---------------------------------------|-------------------------------------|
| Operating Temperature | -40 - 85°C |
| Maximum System Voltage | DC 1,000 V (IEC) DC 1,000 V (UL) |
| Maximum Reverse Current | 15 A |

$\boldsymbol{Module\ Diagram\ (unit:mm)}$



I-V Curves

