

HD HYUNDAI SOLAR MODULE

OI
SERIES

DualMax Pro

HiS-S535OI HiS-S540OI HiS-S545OI HiS-S550OI



Bifacial Cells

144



More Power
Generation
In Low Light



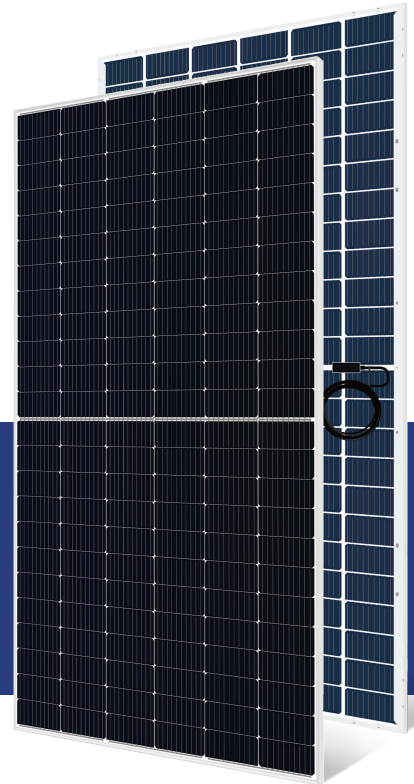
UL 1,500V
IEC 1,500V
Saves BOS Costs



For commercial
& Utility
Applications

KOREA

Made in
South Korea



Maximized Power Generation

Increased total power output through capturing light from both the front and back of Bifacial solar modules. Back side power gain up to 25% of the front output depending on PV system design.



Half-Cut & Multi-Wire Technology

Improved current flow with half-cut technology and multi thin wiring technology allows high module efficiency. It also reduces power generation loss due to micro-cracks.



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.



Certified Test Labs

HD Hyundai's R&D center is an accredited test laboratory of UL, international certification institutions, and guarantees the best quality in the world through rigorous product testing.



Reliable Warranty

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

HD Hyundai's Warranty Provisions



- 12-Year Product Warranty
- Materials and workmanship



- 25-Year Performance Warranty
- Initial year : 97.6%
- Linear warranty after second year:
with 0.6%p annual degradation,
83.2% is guaranteed up to 25 years

About HD Hyundai Energy Solutions

Established in 1972, HD Hyundai 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, HD Hyundai 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 HD, HD Hyundai Energy Solutions has strong pride in providing high-quality PV products to more than 3,000 customers worldwide.

Certification



· UL61730 certified by UL, Module Fire Performance_Type 1

Electrical Characteristics

		Mono-Crystalline Type(HiS-S5350I)			
		535	540	545	550
Nominal Output (P _{mpp})	W	535	540	545	550
Open Circuit Voltage (V _{oc})	V	49.4	49.6	49.7	49.9
Short Circuit Current (I _{sc})	A	13.44	13.51	13.58	13.66
Voltage at P _{max} (V _{mpp})	V	42.2	42.3	42.5	42.6
Current at P _{max} (I _{mpp})	A	12.69	12.76	12.84	12.92
Module Efficiency	%	20.9	21.1	21.3	21.5
Cell Type	-	Mono-crystalline, 10busbar			
Maximum System Voltage	V	1,500			
Temperature Coefficient of P _{max}	%/K	-0.347			
Temperature Coefficient of V _{oc}	%/K	-0.268			
Temperature Coefficient of I _{sc}	%/K	0.032			

*All data at STC / Measurement tolerances P_{mpp} ±3%; I_{sc} ; V_{oc} ±3%. Above data may be changed without prior notice.

Additional Power Gain from rear side		535	540	545	550
5%	W	562	567	572	578
15%	W	615	621	627	633
25%	W	669	675	681	688

Mechanical Characteristics

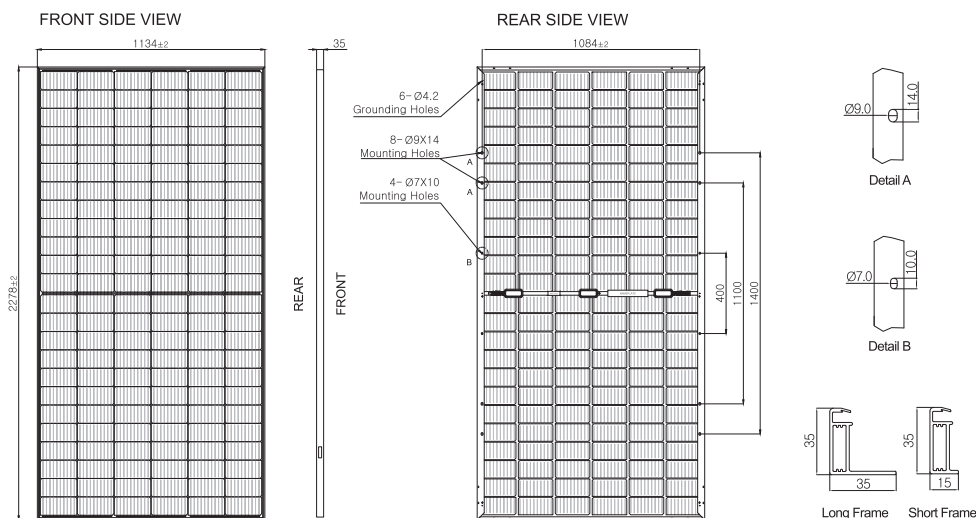
Dimensions	89.7 in (L) x 44.6 in (W) x 1.4 in (H) (2,278 mm x 1,134 mm x 35 mm)
Weight	Approx. 61.3 lbs (27.8 kg)
Solar Cells	144 half cut bifacial cells (2 parallel x 72 half cells in series)
Output Cables	H1Z2Z2-K 4mm ² (12 AWG), 0.4m or 1.4m, IP68 weatherproof connectors, IEC&UL certified, MC4 or MC4 compatible
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 : Transparent Back Sheet (White grid)
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	113.9°F±3.6°F (45.5°C ± 2°C)
Operating Temperature	-40°F~+185°F (-40°C~+85°C)
Maximum System Voltage	DC 1,500 V
Maximum Reverse Current	30A
Maximum Test Load	Front 113psf (5,400Pa) Rear 63psf (3,000Pa)

Module Diagram (unit : mm)



I-V Curves (HiS-S5350I)

