HD HYUNDAI SOLAR MODULE **Double Max Pro** HiS-S575OJ HiS-S580OJ HiS-S585OJ HiS-S590OJ **KOREA** 1,500V 1,500V **Higher Bifacial** ul Iec More Power For commercial Made in Cells Generation & Utility South Korea In Low Light Saves BOS Costs Applications

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.



Both LID(Light Induced Degradation) and PID(Potential Induced Degradation) are significantly reduced 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.

HD Hyundai's Warranty Provisions



YEARS

12-Year Product Warranty
Materials and workmanship

- 25-Year Performance Warranty • Initial year : 98.0%
- Linear warranty after initial year: with 0.54%p annual degradation, 85.0% is guaranteed up to 25years

Certification



·UL61730 certified by UL, Type 1(for Fire Class A)



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.

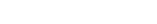


HD Hyundai Energy Solutions, Global brand with powerful financial strength, offers a 25year warranty and comprehensive customer after-sales service.

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 highquality PV products to more than 3,000 customers worldwide.





Electrical Characteristics

Power Class of OJ Series		575	580	585	590
Nominal Output (Pmpp)	W	575	580	585	590
Open Circuit Voltage (Voc)	V	53.4	53.5	53.7	53.9
Short Circuit Current (lsc)	А	13.38	13.45	13.51	13.57
Voltage at Pmax (Vmpp)	V	45.5	45.7	45.8	46.0
Current at Pmax (Impp)	А	12.63	12.70	12.76	12.83
Module Efficiency	%	20.8	21.0	21.2	21.4
Power Tolerance	W	0 ~ +5			
Cell Type	-	Mono-crystalline, 10busbar, bifacial			
Maximum System Voltage	V	1500			
Temperature Coefficient of Pmax	%/K	-0.347			
Temperature Coefficient of Voc	%/K	-0.268			
Temperature Coefficient of Isc	%/K	0.032			

*All data at STC / Measurement tolerances Pmpp ±3%; lsc ; Voc ±3%. Above data may be changed without prior notice.

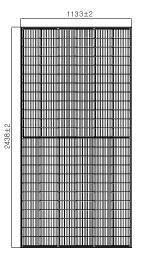
Electrical Characteristics with 10% Solar Irradiance ratio		575	580	585	590
Nominal Output (Pmpp)	W	633	638	643.5	649
Open Circuit Voltage (Voc)	V	53.4	53.5	53.7	53.9
Short Circuit Current (Isc)	А	14.72	14.80	14.86	14.93
Voltage at Pmax (Vmpp)	V	45.5	45.7	45.8	46.0
Current at Pmax (Impp)	А	13.89	13.97	14.04	14.11
Module Efficiency	%	22.9	23.1	23.3	23.5

Mechanical Characteristics

Dimensions	95.9 in (L) x 44.6 in (W) x 1.3 in (H)
	(2,438mm x 1,133mm x 35mm)
Weight	Approx. 66.1 lbs (30.0 kg)
Cell	156 (6x26)monocrystalline half-cut bifacial cells
Glass	3.2mm(0.13in) full-tempered solar glass with high transmittance and antireflective coating
Back sheet	Highly resistant and weatherproof film (Transparent)
Frame	Anodized aluminum alloy
Junction box	3-part, 3 bypass diodes, IP68 rated
Connector	MC4 genuine connector / compatible
	12 AWG(4mm ²)
Cable	Portrait : (-) 250mm(9.8in) / (+) 350mm(13.8in)
	Landscape : (-) 1400mm(55.1in) / (+) 1400mm(55.1in) or Customized length
Packaging	29 pcs/Pallet, 464 pcs/Container(40' HQ)

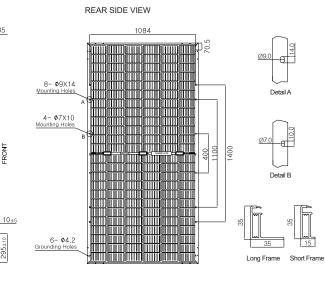
Module Diagram (unit : mm)

FRONT SIDE VIEW



REAR FRONT

295±10

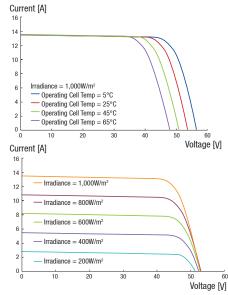


Installation Safety Guide

- 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)		

I-V Curves





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