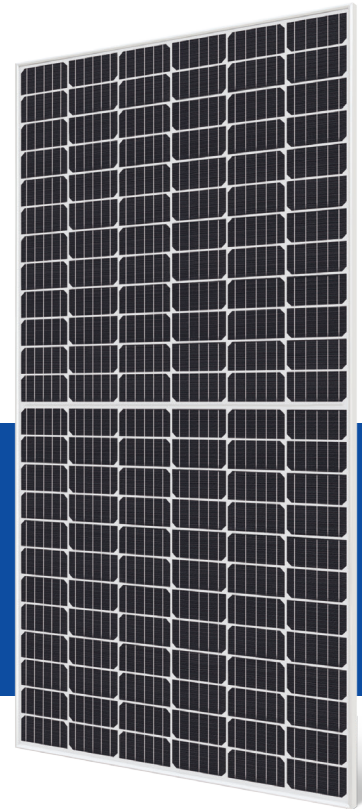


HYUNDAI BIFACIAL MODULE

GI
SERIES

Bifacial Mono PERL Module

HiS-S380GI HiS-S385GI HiS-S390GI HiS-S395GI



144

Bifacial Cells



For commercial & Utility Applications



UL 1,500V Saves BOS Costs



More Power Generation In Low Light



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.



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

Double 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 30-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

12
YEARS

- 12-Years Product Warranty
- On materials and workmanship

30
YEARS

- 30-Year Performance Warranty
- Initial year: 97.6%
- Linear warranty after second year: with 0.6%p annual degradation, 80% is guaranteed up to 30 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



· UL 1703 and UL61730 certified by UL, Type 19(for Fire Class A)



Electrical Characteristics

		Mono-Crystalline Type(HIS-S___GI)			
		380	385	390	395
Nominal Output (P _{mpp})	W	380	385	390	395
Open Circuit Voltage (V _{oc})	V	47.9	48.2	48.5	48.8
Short Circuit Current (I _{sc})	A	10.09	10.13	10.18	10.23
Voltage at P _{max} (V _{mpp})	V	39.6	39.9	40.2	40.5
Current at P _{max} (I _{mp})	A	9.61	9.67	9.72	9.77
Output Tolerance	%	0~ +3 %			

Bifacial Output

Power Gain		380	385	390	395
5%	W	399	404	410	415
10%	W	418	424	429	435
15%	W	437	443	449	454
20%	W	456	462	468	474

Mechanical Characteristics

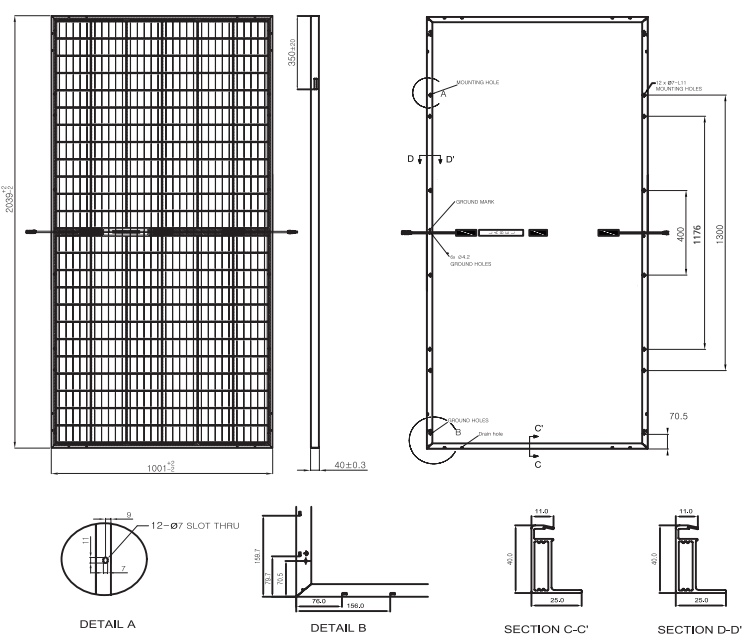
Size	1001 mm (W) x 2039 mm (L) x 40 mm (H) (39.4" x 80.3" x 1.6")
Weight	Approx. 25.7 kg (56.7 lbs)
Solar Cells	144 half cells (2 parallel x 72 half cells in series)
Output Cables	4 mm ² (12AWG) cables with polarized weatherproof MC4 compatible connectors, IEC certified (UL listed), Length 1400 mm (55.1") (* System of protrait type : customized length)
Junction Box	3 boxes-split, IP68, weatherproof, IEC certified (UL listed)
Bypass Diodes	3 bypass diodes to prevent power decrease by partial shade
Construction	Superstrate : Anti-reflection coated tempered glass, 2.0 mm (0.079") Encapsulant : EVA film Substrate : Low-iron tempered glass 2.0 mm (0.079")(white patterned glass)
Frame	Clear anodized aluminum alloy type 6063-T5
Packing	594pcs/Container (27pcs x 22PLTs)

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 75 psf (3,600 Pa)

Module Diagram (unit : mm)



I-V Curves

