Edition V1.0

## **HYUNDAI ENERGY SOLUTIONS Co., Ltd.**

## Specification of HiE-SxxxUF Monocrystalline shingled solar module

Electrical Characteristics at Standard Test Conditions(STC)							Temperature Characteristics	
Module Type:HiE-SxxxUF	400	395	390	385	380	375	NMOT	42.3°C ( ±2°C )
Maximum Power-Pm [W]	400	395	390	385	380	375	Temperature Coefficient of Voc	-0.27%/℃
Open Circuit Voltage-Voc [V]	49.5	49.4	49.3	49.3	49.1	48.9	Temperature Coefficient of Isc	0.04%/℃
Short Circuit Current-Isc [A]	10.12	10.07	10.03	9.98	9.93	9.89	Temperature Coefficient of Pm	-0.34%/°C
Maximum Power Voltage-Vm [V]	41	40.9	40.8	40.8	40.6	40.4		
Maximum Power Current-Im [A]	9.76	9.66	9.56	9.44	9.36	9.28	Maximum Ratings	
Module Efficiency-η [%]	21.3	21.1	20.8	20.5	20.3	20.0	Maximum System Voltage [V]	DC 1500(IEC)
Electrical Characteristics at NMOT							Series Fuse Rating [A]	20
Maximum Power-Pm [W]	301	297	294	290	286	282	Maximum Surface Load Capacity [Pa]	5,400
Open Circuit Voltage-Voc [V]	47.2	47.1	47.0	47.0	46.8	46.6	Temperature Range [°C]	– 40 to + 85
Short Circuit Current-Isc [A]	8.15	8.11	8.08	8.04	8.00	7.97	Withstanding Hail Maximum diameter of 25 mm with in speed of 23 m·s <sup>-1</sup>	Maximum diameter of 25 mm with impact
Maximum Power Voltage-Vm [V]	39.1	39.0	38.9	38.9	38.7	38.5		speed of 23 m·s <sup>-1</sup>
Maximum Power Current-Im [A]	7.71	7.63	7.55	7.45	7.39	7.33	Other Characteristics	•

Note: 1. Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;

- 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/ m²; wind speed 1m/s; ambient temperature 20°C.
- 3. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Packaging 31 pcs/box; 868 pcs/40'container;1426pcs/flat car

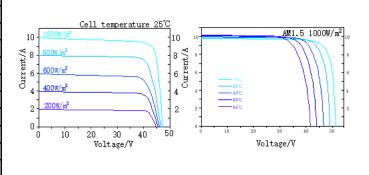
25 year Product Workmanship Warranty

Warranty

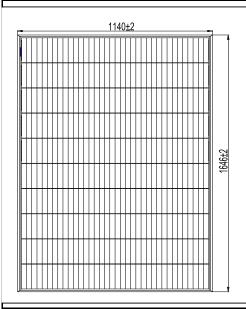
25 year Linear Power Warranty

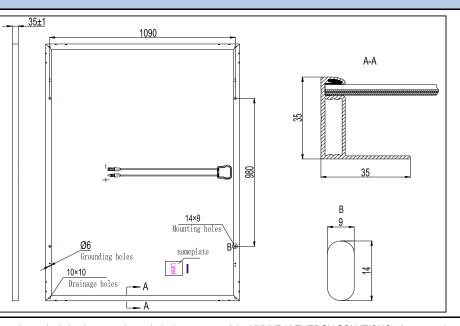
I-V curve

Mechanical Characteristics						
Dimensions	1646×1140×35 mm (L×W×H)					
Weight	20.5kg					
Front Glass	White toughened safety glass, 3.2mm					
Encapsulation	EVA					
Cells	158.75*158.75 PERC solar cells ( in increment of 5 )					
Back Sheet	high weatherability blacksheet					
Frame	Anodized aluminum profile					
Junction Box	Rated current:15A, IP67, TUV&UL					
Cable	Length 1000mm, 1×4mm <sup>2</sup>					
	Zhejiang Renhe Photovoltaic Technology Co., Ltd./05-8					
Connector	Staubli Electrical Connectors AG/ PV-KST4-EVO 2/xy_UR(male); PV-KBT4-EVO 2xy_UR(female)					



## Drawing





Declaration: With the technical progress and product updates, there exists a deviation between the technical parameter of the HYUNDAI ENERGY SOLUTIONS's future products and the technical parameter in this specification, The HYUNDAI ENERGY SOLUTIONS Solar reserves the right to adjust the technical parameter at any time without notifying the customers, HYUNDAI ENERGY SOLUTIONS reserves the final right of interpretation.