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HYUNDAI ENERGY SOLUTIONS Co., Ltd.

V1.0

Specification of HiE-SxxxVG Monocrystalline shingled solar module

Electrical Characteristics at Standard Test Conditions(STC)							Temperature Characteristics	
Module Type:HiE-SxxxVG	410	405	400	395	390	385	NMOT	42.3°C (±2°C)
Maximum Power-Pm [W]	410	405	400	395	390	385	Temperature Coefficient of Voc	-0.27%/℃
Open Circuit Voltage-Voc [V]	46.6	46.5	46.4	46.3	46.3	46.2	Temperature Coefficient of Isc	0.04%/℃
Short Circuit Current-Isc [A]	11.07	11.02	10.97	10.92	10.87	10.82	Temperature Coefficient of Pm	-0.34%/℃
Maximum Power Voltage-Vm [V]	38.8	38.7	38.6	38.5	38.5	38.4		
Maximum Power Current-Im [A]	10.57	10.47	10.36	10.26	10.13	10.03	Maximum Ratings	
Module Efficiency-η [%]	20.9	20.7	20.4	20.2	19.9	19.6	Maximum System Voltage [V]	DC 1500(IEC)
Electrical Characteristics at NMOT							Series Fuse Rating [A]	20
Maximum Power-Pm [W]	309	305	301	297	294	290	Maximum Surface Load Capacity [Pa]	5,400
Open Circuit Voltage-Voc [V]	44.4	44.3	44.2	44.1	44.1	44.0	Temperature Range [°C]	- 40 to + 85
Short Circuit Current-Isc [A]	8.93	8.89	8.85	8.81	8.77	8.73	Withstanding Hail Maximum diameter of 25 mm with impact speed of 23 m·s ⁻¹	
Maximum Power Voltage-Vm [V]	37.0	36.9	36.8	36.7	36.7	36.6		impact speed of 23 m·s ⁻¹
Maximum Power Current-Im [A]	8.35	8.27	8.18	8.10	8.00	7.92	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%.

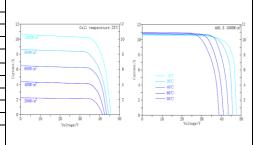
Warranty

Packaging 31 pcs/box;806pcs/40'container;1240pcs/flat car 25 year Product Workmanship Warranty

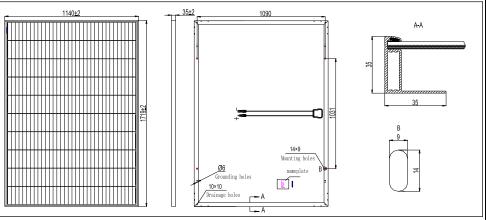
25 year Linear Power Warranty

Mechanical Characteristics			
Dimensions	1710×11/0×35mm (L×W×H)		

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Weight	22kg					
Front Glass	White toughened safety glass, 3.2mm					
Encapsulation	EVA					
Cells	PERC Mono-crystalline 166×166mm					
Back Sheet	high weatherability blacksheet					
Frame	Anodized aluminum profile					
Junction Box	Rated current:20A, IP67, TUV&UL					
Cable	Length 1000mm, 1×4mm ²					
Connector	Zhejiang Renhe Photovoltaic Technology Co., Ltd./05-8					
	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.