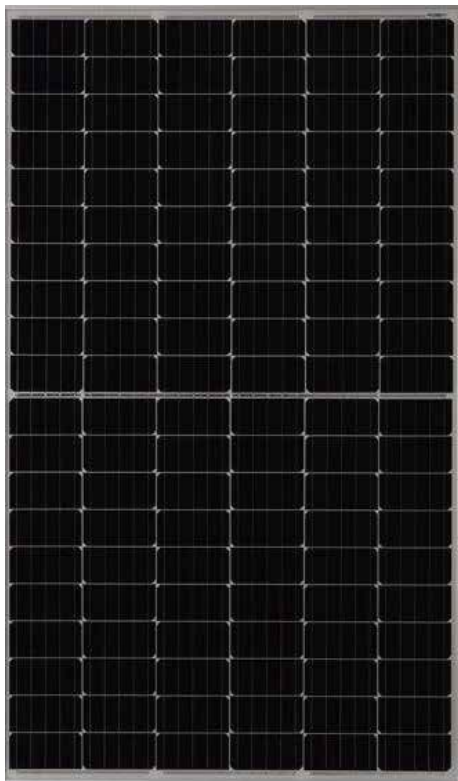


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Half Cut Mono Crystalline Solar Module ESM 485/490/495/500/505S



KEY FEATURES



Excellent module efficiency up to: 21.50%



IP68 junction box for long-term weather endurance



Heavy snow loading up to 5400 Pa, wind loading up to 2400 Pa



PID: selected material and stringent quality system ensure PID free



Applicable to harsh environment of deserts, farmlands and seashores



Much lower risk of Hot Spot

CERTIFICATE



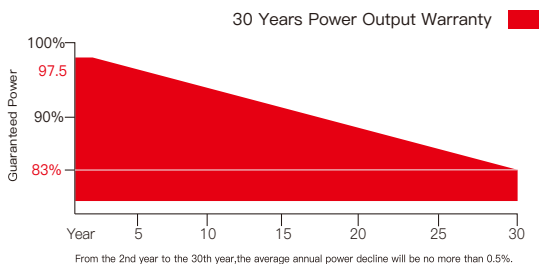
WARRANTY



Linear power output warranty
-12 years minimum 92% power output
-30 years minimum 83% power output

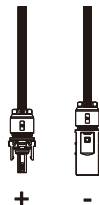
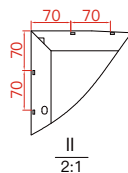
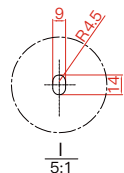
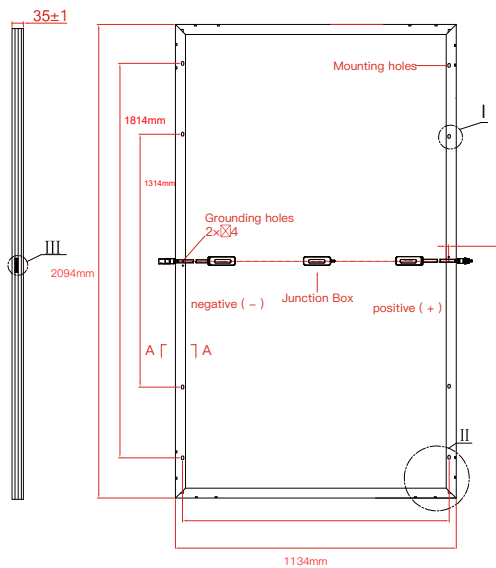
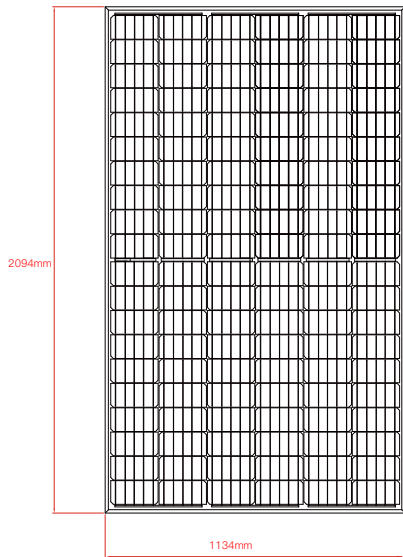


Product warranty on materials and workmanship
According to the applicable Einnova Solarline Limited Warranty Statement

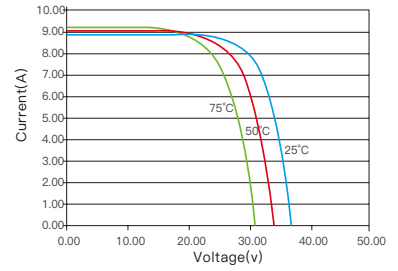
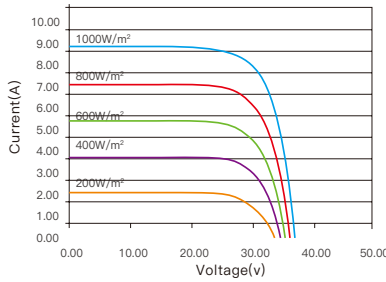


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IV CURVE



ELECTRICAL Specification	Unit	ESM-485S	ESM-490S	ESM-495S	ESM-500S	ESM-505S
Maximum Power (Pmax)	W	485	490	495	500	505
Module Efficiency	%	20.6	20.90	21.10	21.30	21.50
Open Circuit Voltage (Voc)	V	45.10	45.25	45.40	45.55	45.70
Short Circuit Current (Isc)	A	13.67	13.74	13.82	13.90	13.97
Maximum Power Voltage (Vmp)	V	37.93	38.08	38.23	38.38	38.53
Maximum Power Current (Imp)	A	12.79	12.87	12.95	13.03	13.11
Maximum System Voltage	V	ICE 1500VDC				

STC: Irradiance: 1000W/m², Module Temperature: 25°C, Air Mass: 1.5

ELECTRICAL DATA@NOCT	ESM-485S	ESM-490S	ESM-495S	ESM-500S	ESM-505S
Pmax [W]	367	370	374	378	382
Vmp[V]	35.67	35.76	35.84	35.93	36.02
Imp[A]	10.28	10.36	10.44	10.52	10.60
Voc[V]	42.30	42.43	42.58	42.72	42.86
Isc[A]	11.06	11.13	11.20	11.27	11.34

NOCT: Irradiance: 800W/m², Ambient Temperature: 20°C, Air Mas: 1.5, Wind Speed: 1m/s

MECHANICAL SPECIFICATIONS	
Solar Cell Type	Monocrystalline 182"
Number of Cells	132pcs
Module Size	2094*1134*35mm
Weight	25.1kg
Glass	3.2mm tempered glass
Back Sheet	White or Black
Frame	Anodized aluminium alloy, silver or black
Junction Box	IP68, three diodes
Quantity of Diodes	3pcs
Cable	4.0mm ² 1000mm
Connector	MC4 Compatible
Wind/Snow Load	2400pa/5400pa

TEMPERATURE CHARACTERISTIC	
NMOT (Nominal Module Operating Temperature)	45°C (±2°C)
Temperature Coefficient of P _{max}	- 0.36%/°C
Temperature Coefficient of U _{oc}	- 0.26%/°C
Temperature Coefficient of I _{sc}	0.04%/°C

PACKAGING CONFIGURATION	
Modules per box:	30pcs
Number per 20GP:	150pcs
Modules per 40' HQ:	660pcs

MAXIMUM RATINGS	
Operational Temperature	-40 to +85°C
Maximum System Voltage	1500VDC(IEC)
Max Series Fuse Rating	25A
Protection Class	Class II
Snow Loading	5400 Pa
Wind Loading	2400 Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

*design load with safety factor 1.5
(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)