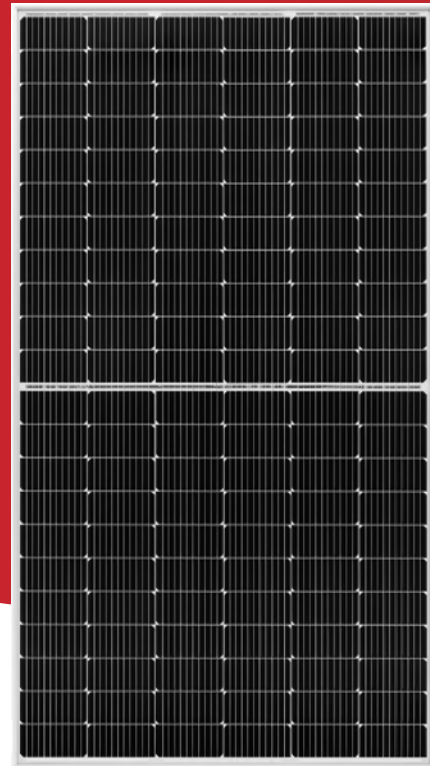


ONYX

490-505W

High Efficiency PERC Monofacial Module



Excellent low irradiance performance.



Better light trapping and current collection to improve module power output and reliability.



Industry leading lowest thermal co-efficient of power.



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.

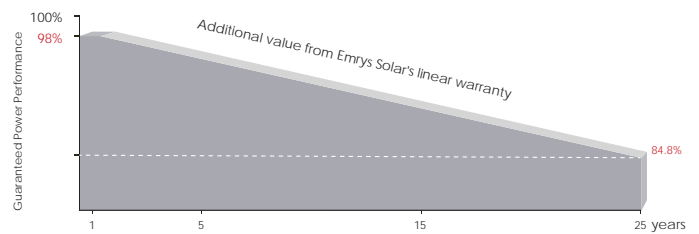


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



100% triple EL test enabling remarkable reduction of hidden crack rate of modules

LINEAR PERFORMANCE WARRANTY



25 years

Product Workmanship Warranty

25 years

Output Power Warranty

COMPREHENSIVE CERTIFICATES



ELECTRIC CHARACTERISTICS

Model of modules	ES490M66-S2		ES495M66-S2		ES500M66-S2		ES505M66-S2	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power – P _{mp} (W)	490	365	495	369	500	373	505	376
Open-circuit voltage – V _{oc} (V)	45.25	42.54	45.34	42.61	45.43	42.71	45.54	42.79
Short-circuit current – I _{sc} (A)	13.71	11.11	13.78	11.17	13.85	11.24	13.95	11.31
Maximum power voltage – V _{mp} (V)	37.27	34.66	37.34	34.72	37.41	34.79	37.53	34.86
Maximum power current – I _{mp} (A)	13.15	10.54	13.26	10.63	13.37	10.73	13.46	10.79
Module efficiency – η _m (%)	20.6%		20.8%		21.1%		21.3%	
Power tolerance (W)					(0,+5)			
Maximum system voltage (V)					1500			
Maximum rated fuse current (A)					25			
Current operating temperature (°C)					-40~+85C			

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C , Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C , Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2094 x 1134 x 35 mm (82.44x 44.65x 1.38 inch)
Weight	26.3 kg (57.98 lbs)
Number of cells	132 cells
Cell	PERC Monocrystalline 182x91 mm(7.17 x 3.58 inch)
Glass	Tempered, 3.2 mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy
Junction box	IP68
Output wire	4.0 mm ² , wire length: 300mm/customized
Connector	MC4 Compatible
Mechanical load	Snow load: 5400 Pa / Wind load: 2400 Pa

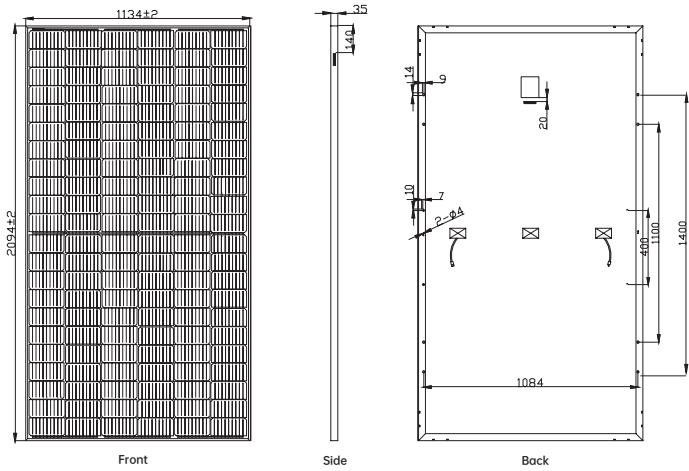
TEMPERFORMANCE RATINGS

Temperature coefficient(P _{max})	-0.35 %/°C
Temperature coefficient(V _{oc})	-0.28 %/°C
Temperature coefficient(I _{sc})	+0.045 %/°C
Nominal operating cell temperature	45±2 °C

PACKAGING CONFIGURATION

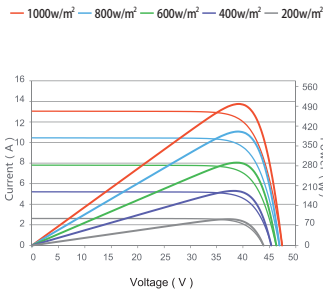
Container	40HQ
Quantity/pallet	31
Pallets/container	22
Quantity/container	682

MODULE DIMENSIONS (MM)



* The unmarked tolerance is ±1 mm Length shown in mm

Current-Voltage & Power-Voltage Curves (505W)



Temperature Dependence of I_{sc}, V_{oc}, P_{max}

