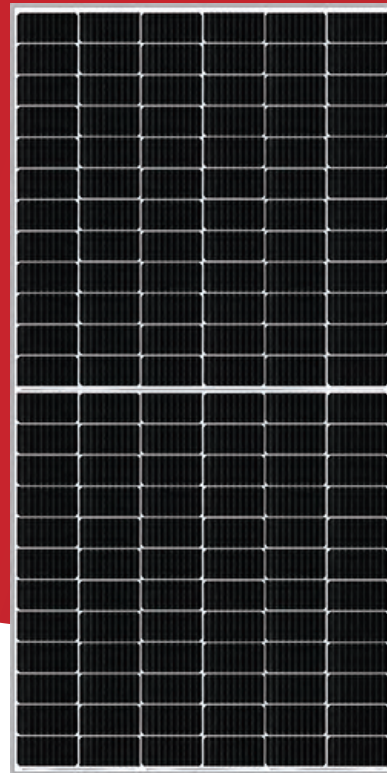


ONYX

540-560W

High Efficiency PERC Monofacial Module



Excellent low irradiance performance.



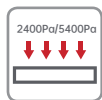
Better light trapping and current collection to improve module power output and reliability.



Industry leading lowest thermal co-efficient of power.



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

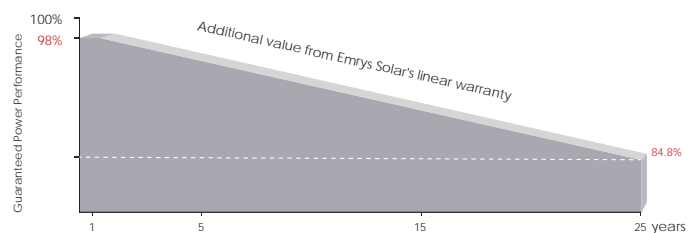


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



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



### ELECTRICAL DATA(STC)

Model Number	ES540M72-S2	ES545M72-S2	ES550M72-S2	ES560M72-S2
Peak Power Watts- $P_{MAX}(Wp)^*$	540	545	550	560
Power Output Tolerance	0~5W			
Open Circuit Voltage- $V_{oc}(V)$	49.40	49.60	49.80	50.20
Short Circuit Current- $I_{sc}(A)$	13.87	13.93	13.99	14.12
Maximum Power Voltage- $V_{MPP}(V)$	41.20	41.40	41.60	42.00
Maximum Power Current- $I_{MPP}(A)$	13.11	13.17	13.23	13.35
Efficiency(%)	20.90	21.09	21.28	21.73

STC :Irradiance 1000w/m<sup>2</sup>,Cell Temperature 25°C,Measure Tolerance :+/- 3%

### ELECTRICAL DATA(NOCT)

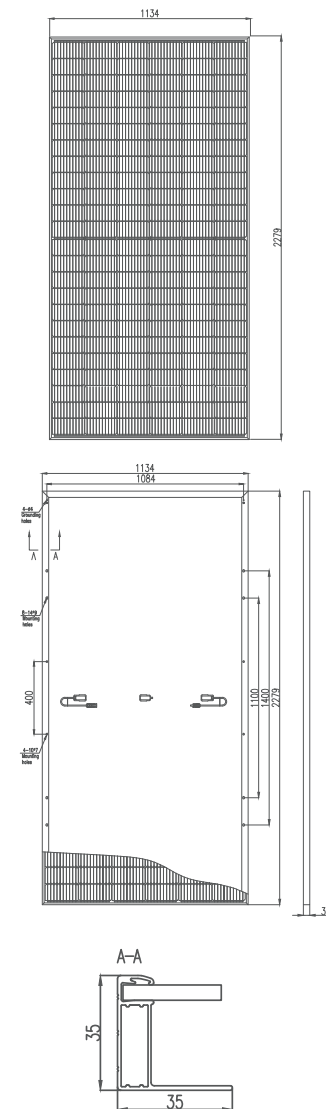
Maximum Power- $P_{MAX}(Wp)^*$	402	406	410	417
Open Circuit Voltage- $V_{oc}(V)$	46.30	46.45	46.60	46.85
Short Circuit Current- $I_{sc}(A)$	11.18	11.23	11.28	11.35
Maximum Power Voltage- $V_{MPP}(V)$	38.40	38.60	38.80	39.42
Maximum Power Current- $I_{MPP}(A)$	10.49	10.53	10.58	10.65

NOCT:Irradiance at 800W/m<sup>2</sup>,Ambient Temperature 20°C,Wind Speed 1m/s

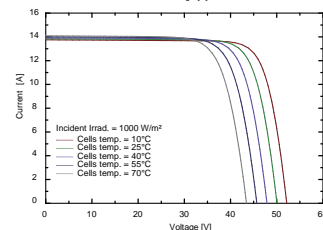
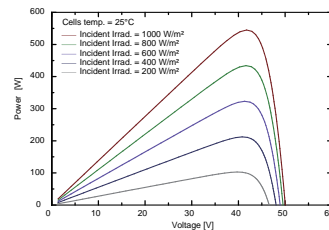
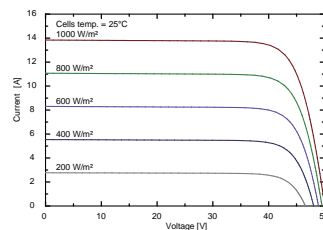
### MECHANICAL DATA

Dimensions	2279 x 1134 x 35 mm
Weight	27kg
Cell Type	Monocrystalline PERC
Cell Size	182x91 mm
Cell Number	144
Glass Type	3.2mm,High Transmission tempering Glass
Encapsulant Type	EVA
Frame Type	Anodized Aluminium Alloy
Junction Box Diodes	3
Junction Box Protection Class	IP68
Connector Type	MC4 or MC 4 Compatible
Cable	1x4mm <sup>2</sup> ,(+) : 350mm , (-) : 350mm or Customized Length

### DIMENSIONS OF PV MODULE(mm)



### CURVES OF PV MODULE



### TEMPERATURE RATINGS

NOCT	41°C(±3°C)
Temperature Coefficient of $P_{MAX}$	-0.36%/°C
Temperature Coefficient of $V_{oc}$	-0.28%/°C
Temperature Coefficient of $I_{sc}$	+0.05%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

### MAXIMUM RATINGS

Operational Temperature	-40~+85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	30A
Max System Voltage	1500V (IEC)
Fire Rating	Class C

### WARRANTY

25 years Product Workmanship Warranty
25 years Output Power Warranty

### PACKAGING CONFIGURATION

Modules per box:31 pieces
Modules per 40' container:620 pieces