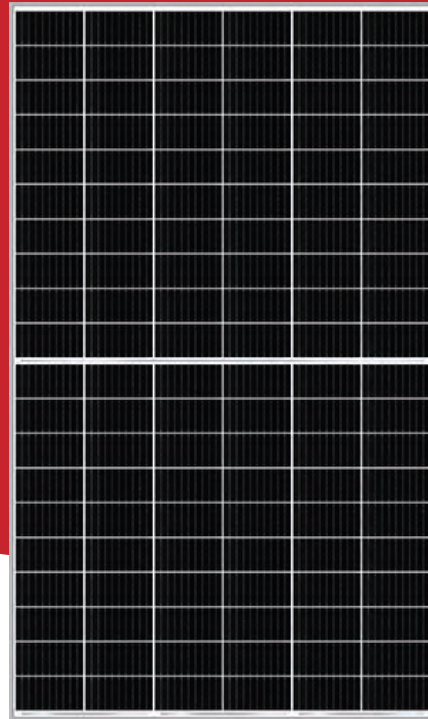


ONYX

590-605W

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.

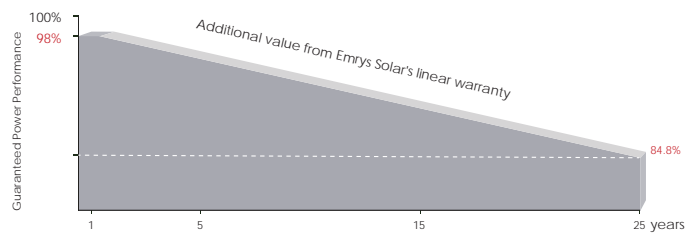


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



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	ES590M60-S3	ES595M60-S3	ES600M60-S3	ES605M60-S3
Peak Power Watts- $P_{MAX}(Wp)^*$	590	595	600	605
Power Output Tolerance	0~5W			
Open Circuit Voltage- $V_{oc}(V)$	41.00	41.30	41.50	41.70
Short Circuit Current- $I_{sc}(A)$	18.42	18.47	18.52	18.57
Maximum Power Voltage- $V_{MPP}(V)$	34.00	34.20	34.40	34.60
Maximum Power Current- $I_{MPP}(A)$	17.35	17.40	17.44	17.49
Efficiency(%)	20.80	21.00	21.20	21.40

STC :Irradiance 1000w/m²,Cell Temperature 25°C,Measure Tolerance :+/- 3%

ELECTRICAL DATA(NOCT)

Maximum Power- $P_{MAX}(Wp)^*$	447	451	454	458
Open Circuit Voltage- $V_{oc}(V)$	38.70	38.90	39.10	39.30
Short Circuit Current- $I_{sc}(A)$	14.85	14.88	14.92	14.96
Maximum Power Voltage- $V_{MPP}(V)$	31.70	31.90	32.00	32.20
Maximum Power Current- $I_{MPP}(A)$	14.09	14.13	14.18	14.22

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

MECHANICAL DATA

Dimensions	2172 x1303 x 35mm
Weight	31kg
Cell Type	Monocrystalline
Cell Size	210x105 mm
Cell Number	120
Glass Thickness	3.2mm,High Transmission tempering Glass
Encapsulant Type	EVA /POE
Frame Type	Anodized Aluminium Alloy
Junction Box Diodes	3
Junction Box Protection Class	IP68
Connector Type	MC4 or MC 4 Compatible
Cable	1x4mm ² ,(+) : 350mm , (-) : 350mm or Customized Length

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)

WARRANTY

25 years Product Workmanship Warranty
25 years Output Power Warranty

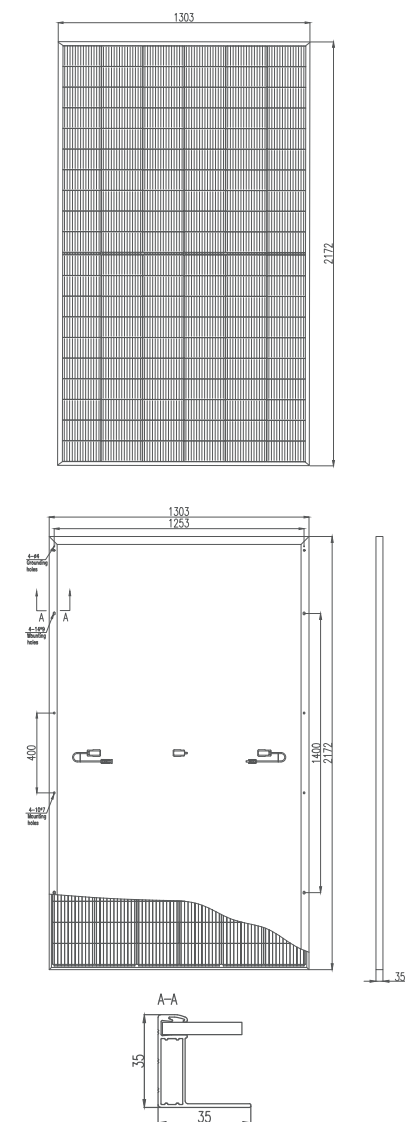
MAXIMUM RATINGS

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

PACKAGING CONFIGURATION

Modules per box:31 pieces
Modules per 40'container:558 pieces

DIMENSIONS OF PV MODULE(mm)



CURVES OF PV MODULE

