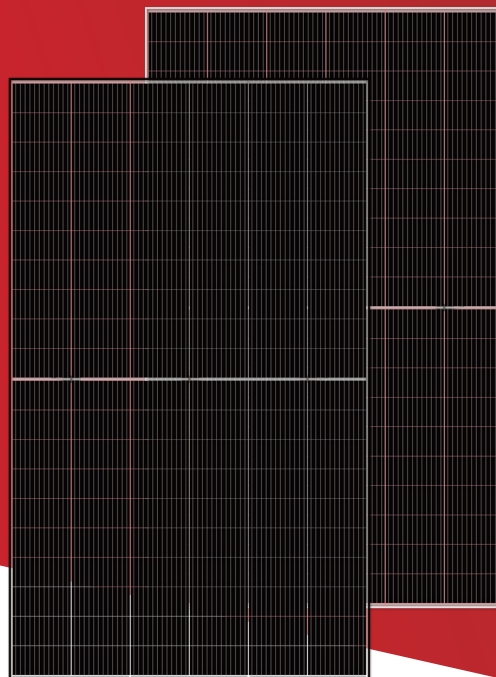


Zosma™ L Pro

590-610W

High Efficiency Bifacial Dual Glass Mono Module



Bifacial technology enables additional energy harvesting from rear side (up to 30%)



Excellent low irradiance performance



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



Industry-leading, lowest thermal coefficient



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



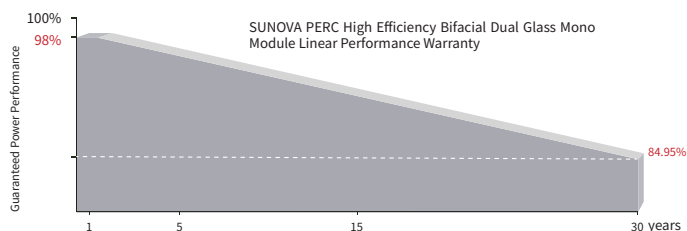
2400Pa/5400Pa

Certified to withstand 2400 Pa of wind load and 5400 Pa of snow load



100% triple EL test, which greatly reduces the hidden cracks rate

LINEAR PERFORMANCE WARRANTY



15 years

Product quality & process guarantee

30 years

Linear power guarantee

0.45 %

Annual degradation over 30 years

COMPREHENSIVE CERTIFICATES



IEC61215/IEC61730/IEC61701/IEC62716/
IEC62804/IEC60068/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

ISO 45001: International Occupational Health and Safety Assessment System Standard

SA 8000: 2014 Social Accountability Management System

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

PERFORMANCE INSURANCE



* Optional performance warranty insurance. Please contact our local sales representatives for more information.

ELECTRICAL CHARACTERISTICS

Model of modules	SS-BG590-60MDH-G12		SS-BG595-60MDH-G12		SS-BG600-60MDH-G12		SS-BG605-60MDH-G12		SS-BG610-60MDH-G12	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	590	440	595	444	600	447	605	451	610	455
Open-circuit voltage — V_{oc} (V)	41.31	38.99	41.54	39.21	41.72	39.38	41.91	39.56	42.11	39.75
Short-circuit current — I_{sc} (A)	18.31	14.79	18.36	14.83	18.42	14.88	18.47	14.92	18.53	14.97
Maximum power voltage — V_{mp} (V)	34.21	32.03	34.41	32.21	34.63	32.42	34.81	32.59	35.01	32.77
Maximum power current — I_{mp} (A)	17.25	13.73	17.31	13.77	17.34	13.80	17.39	13.84	17.43	13.87
Module efficiency — η_m (%)	20.85		21.02		21.20		21.38		21.55	

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER BIN (REFERENCE TO 13.5% IRRADIANCE RATIO)

Maximum power — P_{mp} (W)	646	652	657	663	668
Open-circuit voltage — V_{oc} (V)	41.31	41.54	41.72	41.91	42.11
Short-circuit current — I_{sc} (A)	20.04	20.10	20.16	20.22	20.28
Maximum power voltage — V_{mp} (V)	34.21	34.41	34.63	34.81	35.01
Maximum power current — I_{mp} (A)	18.88	18.95	18.98	19.03	19.08

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	2172 x 1303 x 35 mm
Weight	35.3 kg
Cell	120 cells, PERC Monocrystalline
Front glass	2.0mm, Anti-Reflection Coating
Back glass	2.0mm, Heat Strengthened Glass
Frame	Anodized aluminum alloy (Silver/Black)
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm ²
Wire length	300mm / 1200mm / customized
Connector	MC4 Compatible
Packing Specification	31 pcs/Pallet; 558 pcs/40'HQ

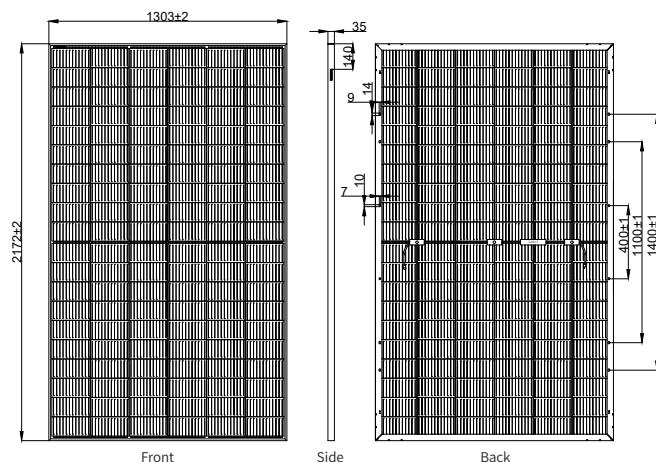
OPERATING PARAMETERS

Power tolerance (W)	(0,+5)
Maximum system voltage (V)	1500
Maximum rated fuse current (A)	35
Current operating temperature (°C)	-40~+85 °C
Mechanical load	5400 Pa / 2400 Pa

TEMPERATURE RATINGS

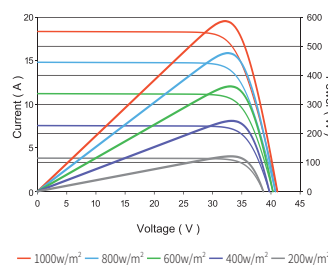
Temperature coefficient (P_{max})	-0.33%/°C
Temperature coefficient (V_{oc})	-0.26 %/°C
Temperature coefficient (I_{sc})	+0.06 %/°C
Nominal operating cell temperature	43±2 °C

MODULE DIMENSIONS (MM)



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

Current-Voltage & Power-Voltage Curves (595W)



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

