



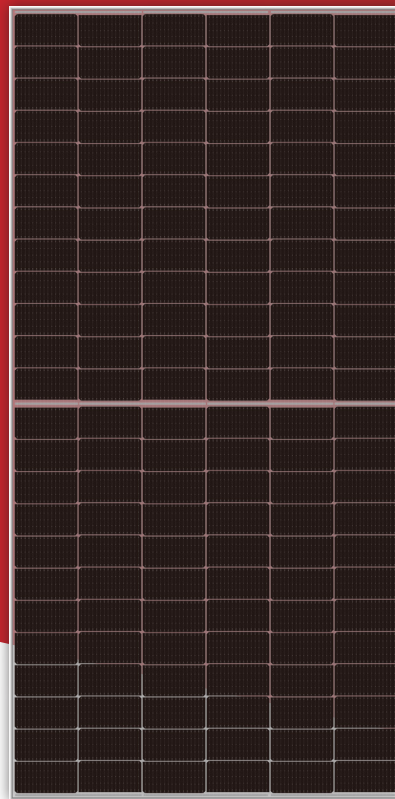
# SUNOVA SOLAR

Leading one-stop PV Supplier

## thor 5x

# 555-575W

### N-type Bifacial Double Glass Mono Module



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



30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module



N-type solar cell has no LID naturally which can increase power generation



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.

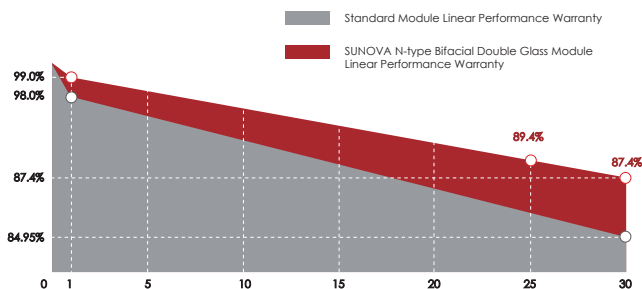


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



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

## LINEAR PERFORMANCE WARRANTY



### 15 years

Product quality & process guarantee

### 30 years

Linear power guarantee

### 0.40%

Annual Degradation

## COMPREHENSIVE CERTIFICATES



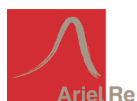
ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

ISO 45001: International Occupational Health and Safety Assessment System Standard

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

## PERFORMANCE INSURANCE



## ELECTRIC CHARACTERISTICS

Model of modules	SS-BG555-72MDH(T)		SS-BG560-72MDH(T)		SS-BG565-72MDH(T)		SS-BG570-72MDH(T)		SS-BG575-72MDH(T)	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — $P_{mp}$ (W)	555	421	560	424	565	428	570	432	575	436
Open-circuit voltage — $V_{oc}$ (V)	50.4	48.2	50.6	48.4	50.8	48.6	51.0	48.7	51.2	48.9
Short-circuit current — $I_{sc}$ (A)	13.93	11.23	13.99	11.28	14.05	11.33	14.11	11.38	14.17	11.42
Maximum power voltage — $V_{mp}$ (V)	42.2	39.6	42.4	39.8	42.6	40.0	42.8	40.2	43.0	40.4
Maximum power current — $I_{mp}$ (A)	13.16	10.61	13.21	10.65	13.27	10.70	13.32	10.74	13.38	10.79
Module efficiency — $\eta_m$ (%)	21.5%		21.7%		21.9%		22.1%		22.3%	

**STC** (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, Spectra at AM1.5

**NOCT** (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

## WITH DIFFERENT POWER GENERATION GAIN (REGARDING 550W AS AN EXAMPLE)

Power Gain (%)	10	15	20	25	30
Peak Power ( $P_{max}$ ) (W)	594	616	638	660	682
MPP Voltage ( $V_{mp}$ ) (V)	42.0	42.0	42.1	42.1	42.1
MPP Current ( $I_{mp}$ ) (A)	14.13	14.65	15.17	15.69	16.20
Open Circuit Voltage ( $V_{oc}$ ) (V)	50.2	50.2	50.3	50.3	50.3
Short Circuit Current ( $I_{sc}$ ) (A)	14.97	15.51	16.06	16.61	17.16

## STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	2278 x 1134 x 30 mm(89.69 x 44.65 x 1.18 inch)
Weight	32.5 kg(71.65 lbs)
Number of cells	144 cells
Cell	N-type Monocrystalline 182x91 mm(7.17 x 3.58inch)
Glass	2.0 mm High Transmission, Antireflection Coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm <sup>2</sup>
Wire length	300mm/customized
Connector	MC4 Compatible
Packing Specification	36 pcs/Pallet; 720 pcs/40'HQ

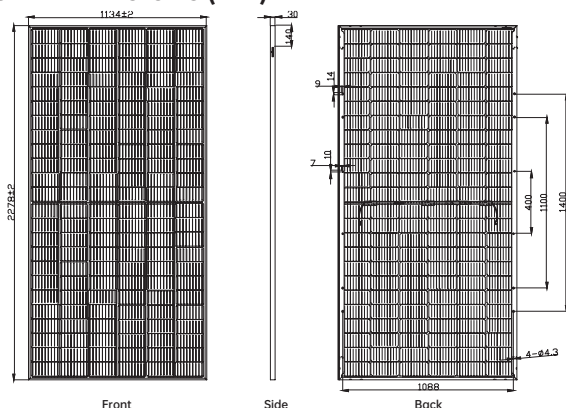
## OPERATING PARAMETERS

Power tolerance (W)	(0,+5)
Maximum system voltage (V)	1500
Maximum rated fuse current (A)	30
Current operating temperature (°C)	-40~+85 °C
Mechanical load	5400 Pa / 2400 Pa

## TEMPERATURE RATINGS

Temperature coefficient ( $P_{max}$ )	-0.310%/°C
Temperature coefficient ( $V_{oc}$ )	-0.260 %/°C
Temperature coefficient ( $I_{sc}$ )	+0.046 %/°C
Nominal operating cell temperature	42±2 °C

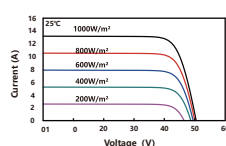
## MODULE DIMENSIONS (MM)



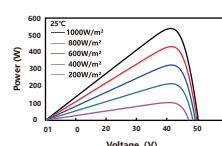
\* The unmarked tolerance is ±1 mm  
Length shown in mm

Characteristic Curves(550W)

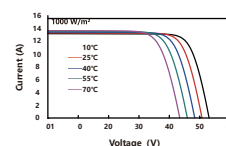
I-V Characteristics At Different Irradiations



P-V Characteristics At Different Irradiations



I-V Characteristics At Different Temperatures



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E-mail: [info@sunova-solar.com](mailto:info@sunova-solar.com)



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