AHONY
Go Solar Gain Power Go Anywhere

Semi Rigid Solar Panel
eMarvel series



Picture maybe different from actual goods due to cell technology or raw material upgrade.

eMARVEL PREMIUM,ADDED VALUE,COST EFFECTIVE*

AHONY eMarvel series uses leading Japan raw material,high efficiency A grade HJT solar cells and automatically producing machine,experienced ultralight solar panel producing experience.We offer more added value on power output,professional test,industrial standard quality control,after sale service and warranty.

10 YEARS POWER GUARANTEE*
2 YEARS WARRANTY

☆ 2 years quality insured,free replacement,maintenance
☆ 10 years power output more than 90%
☆ 25 years power output more than 80%

MAIN FEATURE*

High efficiency solar cell over 25.4%
AHONY uses leading brand Maxeon Gen 7 cell and high efficiency A grade HJT cell to insure high and stable output.

Walkable and Anti-slippery
By any means do not damage cells,the rough anti-slippery surface is safer for walk on when sailing,play on it ,installation or maintenance.

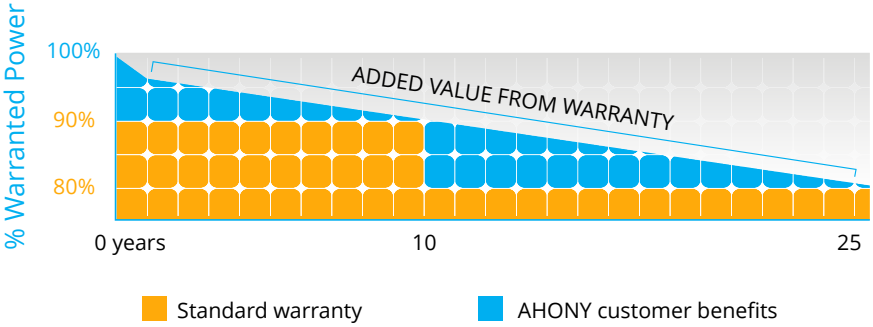
Longer lifespan 15years guaranteed
Premium weather or moisture resistance,for harsh environment 15years life guaranteed,over 25years lifespan.

Flame retardancy and little power loss
The surface material has better flame retardancy UL94 VTM-0.,Rugged and insulated bottom reduces touched area on installed surface,RV,cart etc.Enables air circulation, it cools down panel and get little power loss.

Rigid,thin,light design for widely use
It's rigid to resist hailstone,semi flexible with bend angle less 5 degree,suitable for off grid use,marine,yacht,RV roof,on grid home system,parking lot,portable power generator etc. It's 1/6 thickness 7/10 the weight of glass solar panel.

CERTIFICATIONS AND STANDARDS*

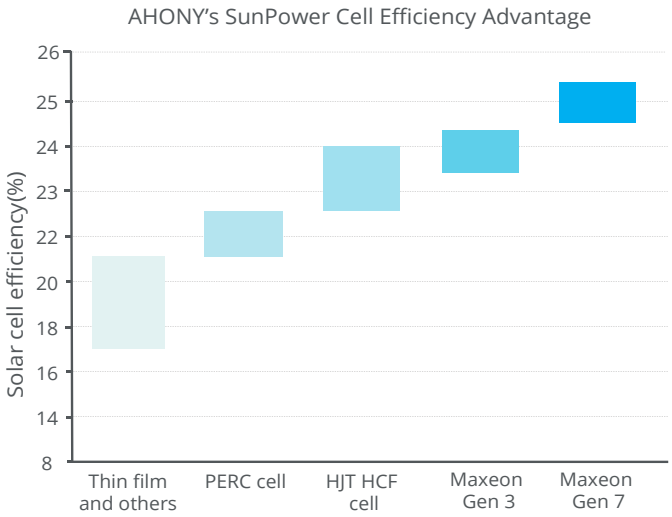
☆CE ROHS test and certified
☆High Temperature test
☆High humidity 85% test
☆SGS IEC standard Salt Spray test



Latest Maxeon Gen 7 SunPower cell

Upgrade to Maxeon Gen 7 cell,max 25.4%,It's still the highest efficiency cell using in application consumer products.





Feature



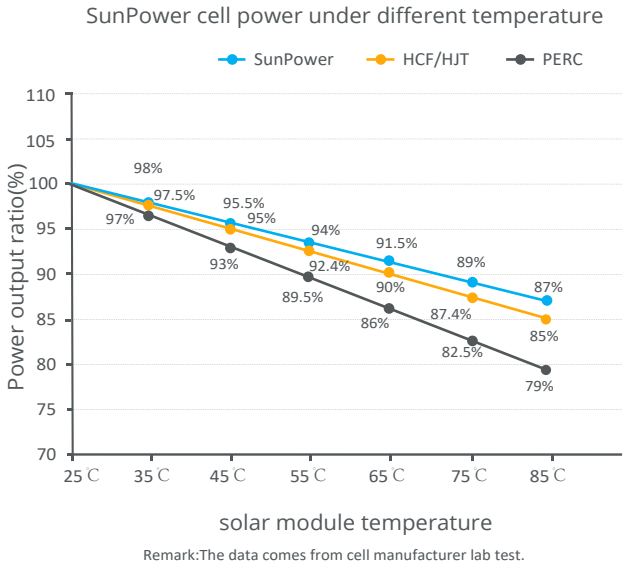


aesthetics pure black module

Maxeon® Technology

- Ultra-pure, n-type, monocrystalline silicon for maximum power.
- Tin barrier prevents corrosion.
- Uniquely durable back-contact design with no ribbons on front.It's no cell crack when walk,step on in solar panel.
- Clean and elegant aesthetics by designing out front contacts.Especially making pure black solar module.





Remark:The data comes from cell manufacturer lab test.

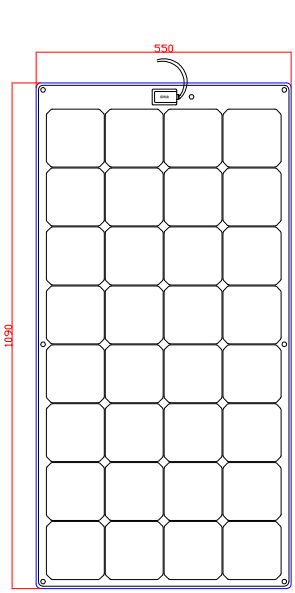
Better low light and high temp power

- Solid metal foundation helps cell bend where others break under pressure.Ideal for making semi rigid or flexible solar panel.
- Conductive and malleable foundation keeps cell electrically intact even if eventuall cracked.
- Maxeon cells solder to lead-free components and are RoHS compliant.
- SunPower cell module has lower power output coefficient, the power decrease much less under low/weak light and high temperature,it's much more stable.

* Please refer to our website or ask AHONY sales representive for the latest parameters.

PHYSICAL CHARACTERISTICS

Can walk or drive on it
High pressure hailstone resistance





APPLICATION

*yacht,boat,wheelhouse roof,sailboat for long journey;
*floating deck,swimming pool;
*seaside,riverside;
*mobile retailing store;
*independent off grid solar system.













ELECTRICAL PARAMETERS*

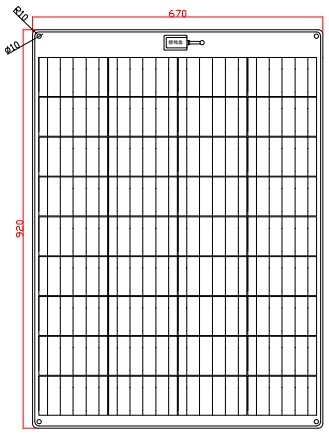
Item	eMarvel 65W	eMarvel 105W	eMarvel 120W	eMarvel 135W	eMarvel 170W	eMarvel 210W
Maximum Power[Wp]	65	105	120	135	170	210
Solar Cell	Monocrystalline back contact solar cell					
Cell Array[Pcs]	2*18	4*7	4*8	4*9	5*9	5*11
Cell Efficiency	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
Size[mm]	290*1220*5	550*1090*5	550*1090*5	550*1220*5	660*1220*5	660*1470*5
Max Power Voltage Vmp[V]	22.6	17.6	20.1	22.6	28.26	34.54
Max Power Current Imp[A]	2.88	5.97	5.98	5.98	6.02	6.08
Open Circuit Voltage Voc[V]	26.0	20.22	23.11	26.0	32.5	39.72
Short Circuit Current Isc[A]	3.05	6.33	6.33	6.34	6.38	6.45
Net.Weight[kg]	3	4.2	4.9	5.2	6.5	8.5
NOCT[℃]	46±2	46±2	46±2	46±2	46±2	46±2
Operating Temperature[℃]	-40/+85					
Temp.Coeffi.Pmax[%/℃]	-0.3					
Temp.Coeffi.Voc[%/℃]	-0.236					
Temp.Coeffi.Isc[%/℃]	+0.058					
Max System Voltage[V]	1000V DC					
Maximum Series Fuse Rating	10-20A					
Safety Class	A					
Certification	CE,RoHS,ISO9001,SGS,IEC					
Flame retardancy	UL 94 VTM-0					
Standard Test Conditions	STC: 1000W/m², AM 1.5 and cell temp 25°C					

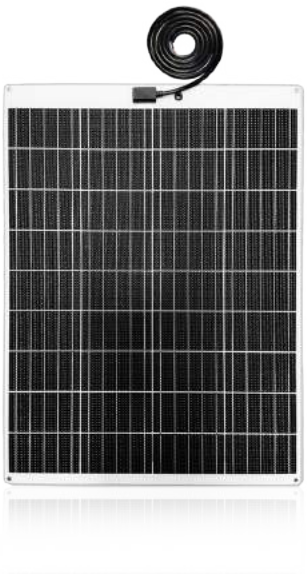
* Please refer to our website or ask AHONY sales representive for the latest parameters.

HIGH EFFICIENCY HCF/HJT SOLAR CELLS

HCF/HJT Mono solar cells efficiency 22.7% to 24%;
Automatically producing;
More affordable.
Speical copper metal backsheet and reinforced AP2 material,upgrade more durable than former ones.

*yacht,boat,wheelhouse roof,sailboat for long journey;
*floating deck,swimming pool;
*seaside,riverside;
*mobile retailing store;
*independent off grid solar system.

















ELECTRICAL PARAMETERS*

Item	eMarvel M60W	eMarvel M100W	eMarvel M150W	eMarvel M200W	eMarvel M260W	eMarvel M300W
Maximum Power[Wp]	60	100	150	200	260	300
Solar Cell	HCF/HJT monocrystalline solar cell					
Cell Array[Pcs]	2*18	3*12	4*9	4*9	6*8	6*9
Cell Efficiency	22.7%	22.7%	22.7%	22.7%	22.7%	22.7%
Size[mm]	510*1010*5	510*1045*5	510*1210*5	670*1515*5	1000*1355*5	1000*1515*5
Max Power Voltage Vmp[V]	22.6	22.6	22.6	22.6	30.14	33.91
Max Power Current Imp[A]	2.66	4.43	4.79	5.27	8.63	8.85
Open Circuit Voltage Voc[V]	26.2	26.2	26.2	26.2	34.96	39.34
Short Circuit Current Isc[A]	2.82	4.7	5.05	5.56	9.15	9.38
Net.Weight[kg]	3.2	4.9	5.2	6.5	9.0	12
NOCT[℃]	46±2	46±2	46±2	46±2	46±2	46±2
Operating Temperature[℃]	-40/+85					
Temp.Coeffi.Pmax[%/℃]	-0.44					
Temp.Coeffi.Voc[%/℃]	-0.33					
Temp.Coeffi.Isc[%/℃]	+0.06					
Max System Voltage[V]	1000V DC					
Max Reverse Current[A]	0-1A					
Safety Class	A					
Certification	CE,RoHS,ISO9001,SGS,IEC					
Flame retardancy	UL 94 VTM-0					
Standard Test Conditions	STC: 1000W/m², AM 1.5 and cell temp 25°C					

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