



# 575~595W

Module Half Cell - Mono-Crystalline N Type 144 Cell

Dual Glass Bifacial Silver Frame



0~+3%

POWER SORTING

23.0%

MAX MODULE EFFICIENCY

≤1.0%

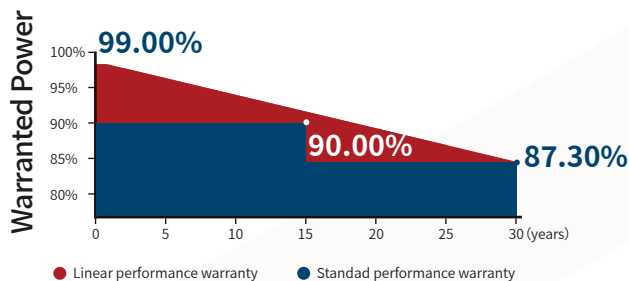
FIRST YEAR POWER DEGRADATION

≤0.4%

YEAR 2-30 POWER DEGRADATION

## Key Features

- Multi Busbar Solar Cell
- High Efficiency
- PID Resistance
- Low-light Performance
- Severe Weather Resilience
- Durability Against Extreme Environmental Conditions

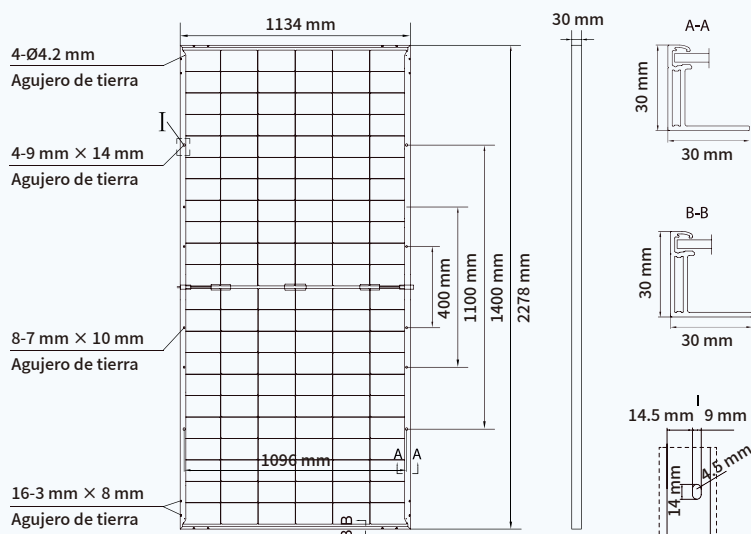


## Warranty

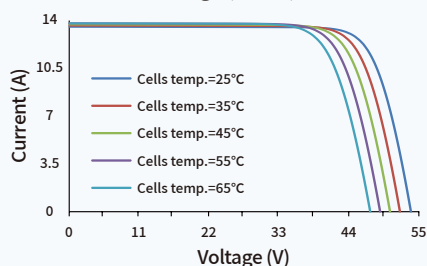
- Ground Base Station
- 15 YEAR Materials Warranty
- 30 YEAR Power Warranty



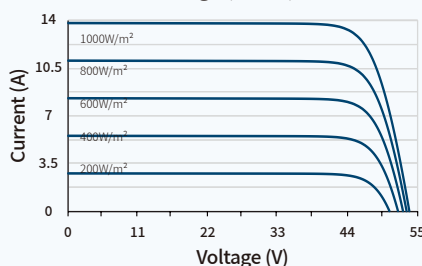
## Drawings (Unit:mm)



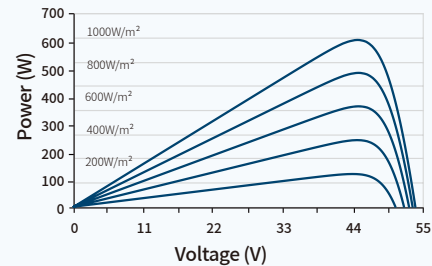
Current-Voltage (590W)



Current-Voltage (590W)



Power-Voltage (590W)



## Mechanical Parameters

Cells	N-Type Mono-Crystalline
Cell Orientation	144[6x24]
Dimension	2278±2x1134±2x30mm(89.68×44.64×1.18 inch)
Weight	31.5kg (69.44lb)
Front / Back Glass	2.0+2.0mm
Frame	Aluminum, Silver Anodized
Junction Box	HCB40 (Estándar)
Output Cable	4mm <sup>2</sup> /12AWG
Cable Length	1400mm or Customized Length
Maximum Static Load	2400Pa/5400Pa
Fire Rating	UL: Type 1, IEC:Class C
Packaging	36pcs/pallet, 72pcs/stack, 720pcs/53FT Truck

## Temperature Parameters

Temperature Coefficient (Pmax)	-0.28%/°C
Temperature Coefficient (Voc)	-0.24%/°C
Temperature Coefficient (Isc)	+0.046%/°C
NMOT	41±2°C

## Maximum Ratings

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30 A
Power Output Tolerance	0~+3%

## Electrical Characteristics(STC)

**STC:** Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: ±3%

Maximum Power:Pmax[W]	575	580	585	590	595
Open Circuit Voltage:Voc[V]	52.10	52.30	52.50	52.70	53.20
Short Circuit Current:Isc[A]	13.80	13.85	13.90	13.95	14.15
Voltage at Maximum Power:Vmp[V]	43.76	43.93	44.10	44.27	44.41
Current at Maximum Power:Imp[A]	13.14	13.21	13.27	13.33	13.40
Module Efficiency: η [%]	22.30	22.50	22.60	22.80	23.00

## Electrical Characteristics(NMOT)

**NMOT:** Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

Maximum Power:Pmax[W]	432.4	436.2	439.9	443.7	447.4
Open Circuit Voltage :Voc[V]	49.50	49.69	49.88	50.07	50.54
Short Circuit Current :Isc[A]	11.14	11.18	11.22	11.26	11.42
Voltage at Maximum Power:Vmp[V]	40.76	40.89	41.08	41.24	41.35
Current at Maximum Power:Imp[A]	10.61	10.67	10.71	10.76	10.82

## Electrical Characteristics(Rear Power Gain)

5%	Maximum Power:Pmax[W]	604	609	614	619	624
	Module Efficiency: η [%]	23.39	23.58	23.76	23.96	24.15
15%	Maximum Power:Pmax[W]	661	667	673	678	684
	Module Efficiency: η [%]	25.58	25.82	26.05	26.24	26.47
25%	Maximum Power:Pmax[W]	719	725	731	737	743
	Module Efficiency: η [%]	27.83	28.06	28.29	28.55	28.76