

**UNI T**

**UE590T-72HBD**

**570-590W**

**N-type TOPCon Bifacial Dual Glass Solar Module**



**22.82%**  
Max Module Eff.



**Positive power tolerance**  
(0-+5W) guaranteed



**High module conversion efficiency**  
(up to 22.82%)



**Slower power degradation**  
enabled by low LID Mono TOPCon technology: first year < 1% , 0.40% year 2-30



**Solid PID resistance**  
ensured by solar cell process optimization and careful module BOM selection



**Reduced resistive loss**  
with lower operating current



**Higher energy yield**  
with lower operating temperature



**Reduced hot spot risk**  
with lower operating electrical design and lower operating current

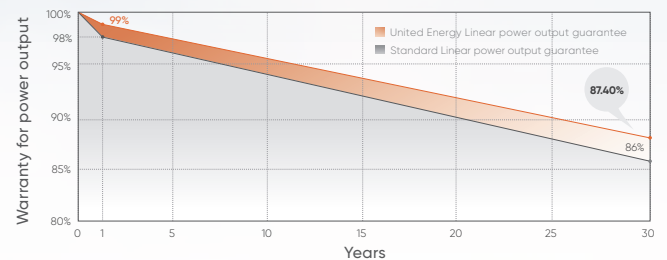


**Quality Management System and Product Certification**

IEC 61215, IEC 61730, UL 61730  
ISO9001: 2015: ISO Quality Management System.  
ISO14001: 2015:ISO Environmental Management System.  
ISO45001: 2018: Occupation Health and Safety.  
IEC62941:Guideline for module design qualification and type approval.

**Quality Guarantee**

**25** year Materials Warranty      **30** year Power Warranty



## Electrical Parameters(STC\*)

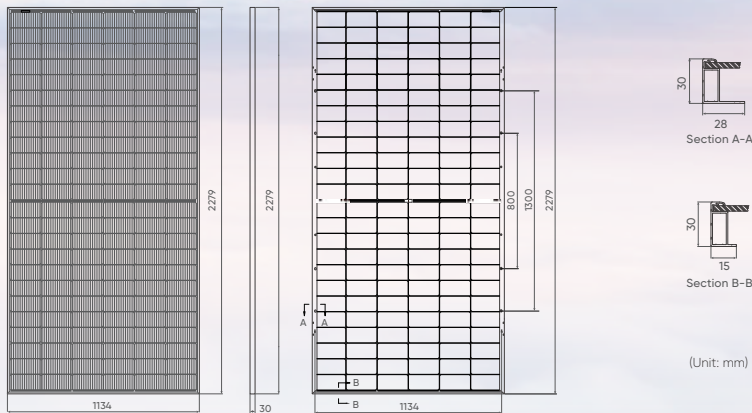
Module Type	570	575	580	585	590
Maximum power (Pmax/W)	570	575	580	585	590
Open Circuit Voltage (Voc/V)	51.41	51.55	51.79	52.03	52.17
Short Circuit Current (Isc/A)	14.15	14.22	14.29	14.36	14.43
Voltage at Maximum power (Vmpp/V)	42.41	42.56	42.71	42.86	43.01
Current at Maximum Power (Imp/A)	13.44	13.51	13.58	13.65	13.72
Module Efficiency(%)	22.06	22.25	22.44	22.64	22.82

## Bifacial Output Rear side Power Gain

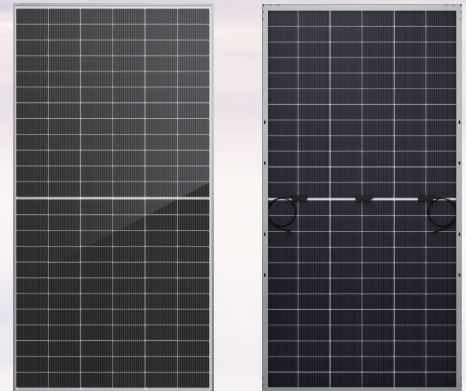
5%	Maximum power (Pmax/W)	599	604	609	614	619
	Module Efficiency STC (%)	23.17	23.37	23.56	23.77	23.97
15%	Maximum power (Pmax/W)	656	661	667	672	678
	Module Efficiency STC (%)	25.38	25.57	25.80	26.04	26.25
25%	Maximum Power (Pmax/W)	713	719	725	731	737
	Module Efficiency STC (%)	27.58	27.82	28.05	28.29	28.54

- Standard Test Conditions [STC]: irradiance 1000W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;
- Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

## Design(mm)



## Product Image



## Design(mm)

Solar Cells	N-type Mono
No. of Cells	144 (6×24)
Dimensions	2279 × 1134 × 30mm
Weight	31.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back: 2.0mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 Bypass Diodes)
Output Cables	4mm <sup>2</sup> , 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 720pcs/40'HQ

## Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	1500V DC (IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

## Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C