

## TPM7-UHLDD144

# 555-585W

### N-TYPE BIFACIAL DOUBLE GLASS PV MODULE



#### Excellent Cells Efficiency

- SMBB technology reduce the distance between busbars and finger grid line which is benefit to power increase



#### Enhanced Weak Light Performance

- Delivers higher power output under weak light conditions, such as haze, cloudy weather, and early morning



#### Anti PID

- Ensured PID resistance through the quality control of cell manufacturing process and raw materials



#### Adapt To Harsh Outdoor Environment

- Withstands extreme conditions including salt, ammonia, sand, high temperatures, and high humidity



#### Bifacial Technology

- Up to 25% additional power gain from back side depending on albedo

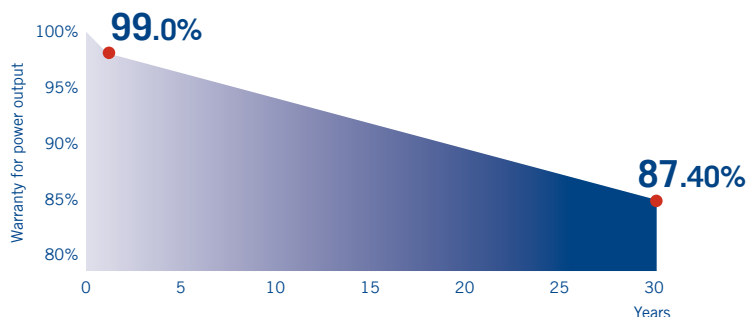
### Linear Power Output Warranty

# 12

12-year warranty for materials

# 30

30-year warranty for linear power output



### Quality Management System and Product Certification



IEC 61215/IEC 61730/IEC 61701/IEC 62716/UL61730  
ISO 14001: Environmental Management System  
ISO 9001: Quality Management System  
ISO45001: Occupational Health and Safety Management System

**Electrical Characteristics (STC)**

Module Type (TPM7-UHLDD144)		555	560	565	570	575	580	585
Maximum Power Voltage Vmp	[V]	41.8	42	42.2	42.4	42.6	42.8	43
Maximum Power Current Imp	[A]	13.28	13.34	13.39	13.45	13.5	13.56	13.61
Open Circuit Voltage Voc	[V]	50.5	50.7	50.9	51.1	51.3	51.5	51.7
Short Circuit Current Isc	[A]	14.05	14.11	14.17	14.23	14.29	14.35	14.41
Module Efficiency	[%]	21.48	21.68	21.87	22.07	22.26	22.45	22.65

**Electrical Characteristics (NMOT)**

		419	422.8	426.4	430.3	433.9	437.8	441.4
Maximum Power Pmax	[Wp]							
Maximum Power Voltage Vmpp	[V]	39.3	39.5	39.7	39.9	40	40.2	40.4
Maximum Power Current Impp	[A]	10.65	10.7	10.74	10.79	10.83	10.88	10.93
Open Circuit Voltage Voc	[V]	47.7	47.8	48	48.2	48.4	48.6	48.8
Short Circuit Current Isc	[A]	11.34	11.39	11.44	11.48	11.53	11.58	11.63

**ELECTRICAL CHARACTERISTICS WITH 25% REAR SIDE POWER GAIN**

		555	560	565	570	575	580	585
Front power Pmax	[W]							
Total power Pmax	[W]	694	700	706	713	719	725	731
Vmp (Total)	[V]	41.9	42.1	42.3	42.5	42.7	42.9	43.1
Imp (Total)	[A]	16.56	16.63	16.7	16.76	16.83	16.9	16.97
Voc (Total)	[V]	50.6	50.8	51	51.2	51.4	51.6	51.8
Isc (Total)	[A]	17.52	17.59	17.67	17.74	17.82	17.88	17.96

**Mechanical Characteristics**

Solar cells	N-type Monocrystalline
Cells orientation	144(6x24)
Module dimension	2278x1134x30 mm (With Frame)
Weight	31.5±1.0 kg
Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Junction box	IP 68,3 diodes
Cables	4 mm <sup>2</sup> , 400 mm or Customized length
Connectors*	MC4-EVO2

**Application Conditions**

Maximum system voltage	1500 V DC
Operating temperature	-40 C ~+85 C
Maximum series fuse	30 A
Front Side Maximum Static Loading	Up to 5400Pa
Rear Side Maximum Static Loading	Up to 2400Pa

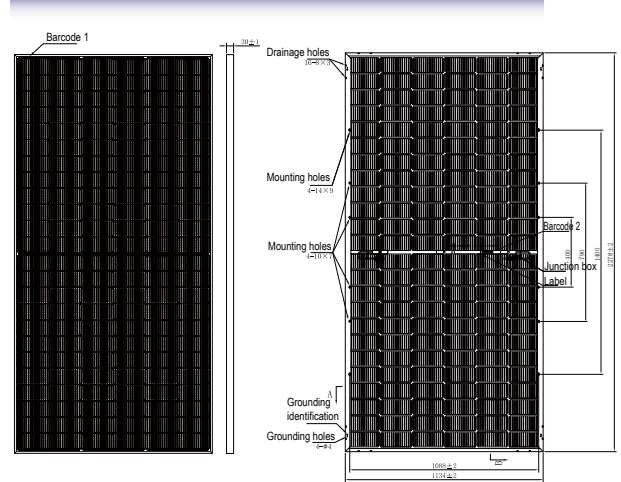
**Temperature Characteristics**

NMOT	44 C ±2 C
Temperature coefficient of Pmax	(-0.30±0.03)%/C
Temperature coefficient of Voc	-0.25%/C
Temperature coefficient of Isc	0.046%/C
Bifaciality	80±10%

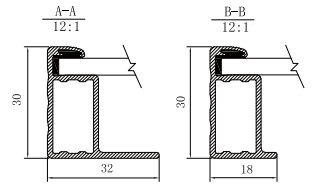
**Packing Configuration**

Piece/Box	36
Piece/Container(40'HQ)	720

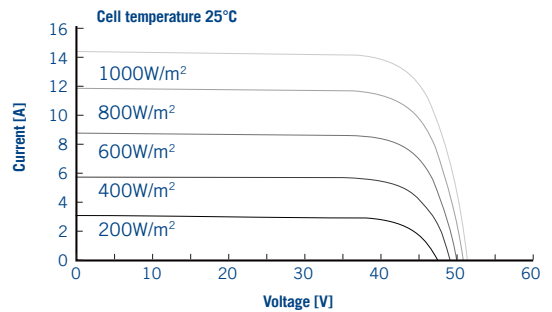
**Engineering Drawings**



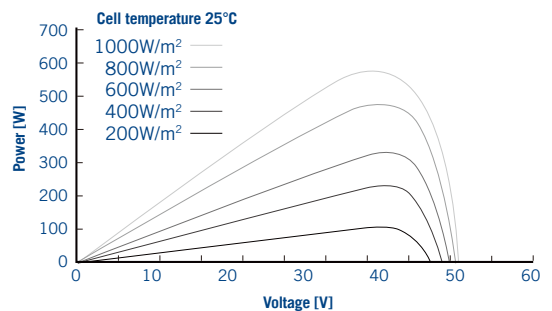
Unit: mm



**I-V CURVES OF PV MODULE (570W)**



**P-V CURVES OF PV MODULE (570W)**



**Declaration:** With the technical progress and product updates, there exists a deviation between the technical parameter of the Topco Solar's future products and the technical parameter in this specification. The Topco Solar reserves the right to adjust the technical parameter at any time without notifying the customers. Topco Solar reserves the final right of interpretation.

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