

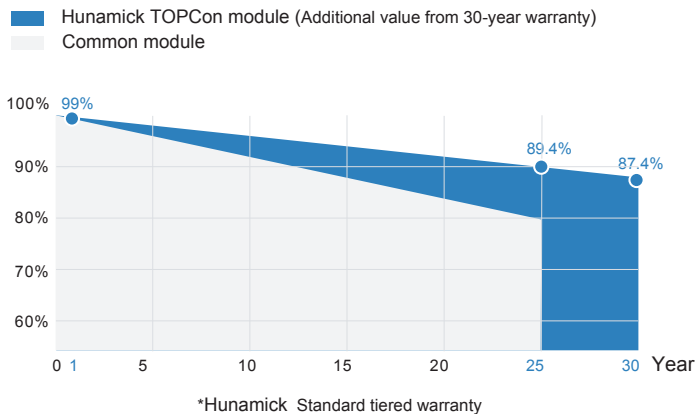
M10 TOPCON BIFACIAL

HMDGxxx-N144M10

550~590W

- Double glass
- Silver frame
- Bifacial transparent

25 Yr quality guarantee | 30 Yr power warranty



WARRANTY & GUARANTEE

Linear output power guarantee
25 years: 89.4% power output
30 years: 87.4% power output



WITHSTAND STRONG

Snow load 5400Pa
Wind load 2400Pa



PID RESISTANCE

Power positive tolerance:
0~+5W.
The attenuation probability of PID phenomenon is minimized through battery production technology optimization and material control



R&D AND PRODUCTION

Advanced production line. Bifaciality>80%, effectively improves backside power generation. The leading solar cell cutting process and multi busbar design with TOPCon Technology.



HIGH EFFICIENCY

N-type, Components have better reliability and lower LID/LETID attenuation. Efficiency can reach 22.83%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.

Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m², Cells Temperature 25°C)

Typical type	550W	555W	560W	565W	570W	575W	580W	585W	590W
Max power(Pmax)	550	555	560	565	570	575	580	585	590
Max power voltage(Vmp)	41.73	41.86	41.99	42.13	42.26	42.41	42.56	42.72	42.87
Max power current(Imp)	13.18	13.26	13.34	13.41	13.49	13.56	13.63	13.7	13.77
Open circuit voltage(Voc)	50.56	50.7	50.84	50.98	51.13	51.28	51.43	51.58	51.7
Short circuit current(Isc)	13.95	14.01	14.07	14.13	14.2	14.27	14.34	14.41	14.48
Module Efficiency(%)	21.28	21.48	21.67	21.86	22.06	22.25	22.44	22.64	22.83
Max system voltage	DC 1500V (TÜV,UL)								
Maximum Series Fuse Rating	30A								

Electrical Characteristics with 15% Rear Side Power Gain

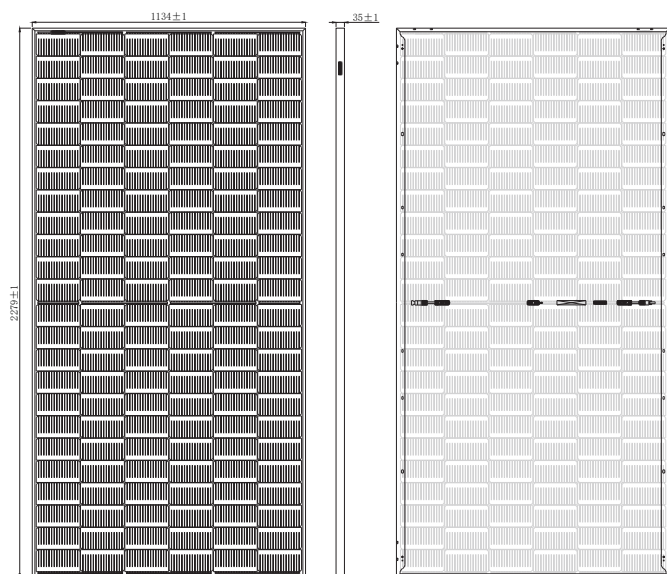
Front power Pmax/W	550W	555W	560W	565W	570W	575W	580W	585W	590W
Total power Pmax/W	632.5	638.25	644	649.75	655.5	661.25	667	672.75	678.5
Vmp/V(Total)	41.73	41.86	41.99	42.13	42.26	42.41	42.56	42.72	42.87
Imp/A(Total)	15.16	15.25	15.34	15.42	15.51	15.59	15.67	15.75	15.83
Voc/V(Total)	50.56	50.7	50.84	50.98	51.13	51.28	51.43	51.58	51.7
Isc/A(Total)	16.04	16.11	16.18	16.25	16.33	16.41	16.49	16.57	16.65

Electrical parameters at NMOT test conditions

(Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

Typical type	550W	555W	560W	565W	570W	575W	580W	585W	590W
Max power(Pmax)	411	417	421	425	429	433	436.7	437.3	441
Max power voltage(Vmp)	38.9	39.3	39.5	39.7	39.7	39.9	40.1	39.9	40.00
Max power current(Imp)	10.56	10.62	10.67	10.72	10.79	10.85	10.90	10.96	11.02
Open circuit voltage(Voc)	47.4	47.7	47.9	48.1	48.2	48.4	48.5	48.3	48.40
Short circuit current(Isc)	11.24	11.29	11.34	11.39	11.44	11.50	11.56	11.61	11.67

DIMENSIONS AND STRUCTURE



Mechanical Data

Dimensions	2279x1134x35mm
Weight	31 kg
Glass	(F)2.0mm ultra clear embossed double layer colorless glass (B)2.0mm semi-tempered glass
Output cables	4mm ² , symmetrical lengths 1300mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline, N type Bifacial, 182x91mm
Number of cells	144cells (Half-Cell)

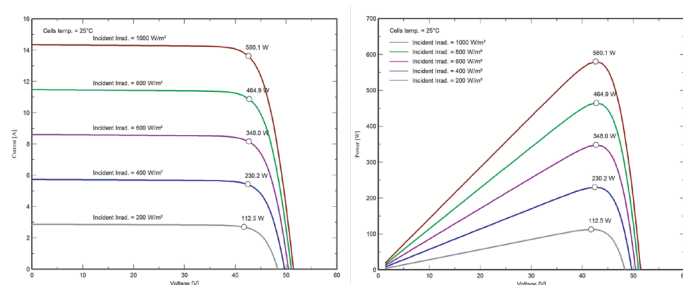
Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.046%/°C
Temp.Coeff.of Voc(TK Voc)	-0.25%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.30%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	45±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	31
Pallets per container	20
Pieces per container	620

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, CEC, UL, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+5W
Junction box	IP 68
Warranties	25 years product warranty and 30 years 87.4% of power