



PERLIGHT SOLAR
Powering Possibilities

PERLIGHT SOLAR CO.,LTD.

www.perlight.com

**N-type Half-cell
Bifacial Module**

PLM-585DH8N-144 SERIES



Bifacial Cell

- Extra energy generated from the backside of the cell depending on albedo



Fire Rating

- Class A



Pfas Free

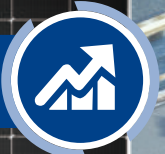
- Product free from perfluoroalkyl and polyfluoroalkyl substances



Sustainable Product

- High percentage of recyclable materials

**High Power Output
Low LCOE**



**Maximum Power
585W+**



**15
YEAR**
Materials
Warranty

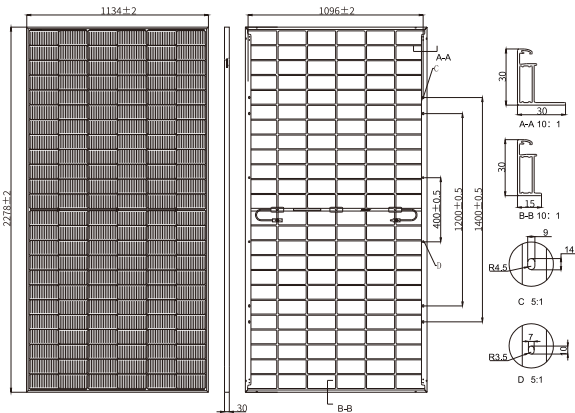
**30
YEAR**
Power
Warranty

- 1% First year degradation
- 0.4% Annual degradation
- 87.4% Power in year 30





Drawings (Unit: mm)



Electrical Characteristics (STC)

Maximum Power: Pmax [W]	565	570	575	580	585
Open Circuit Voltage: Voc [V]	51.04	51.24	51.44	51.64	51.84
Short Circuit Current: Isc [A]	14.17	14.21	14.25	14.29	14.33
Voltage at Maximum Power: Vmp [V]	42.68	42.88	43.08	43.28	43.48
Current at Maximum Power: Imp [A]	13.24	13.29	13.35	13.40	13.46
Module Efficiency: η [%]	21.9	22.1	22.3	22.5	22.6

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	424.8	428.6	432.4	436.1	439.9
Open Circuit Voltage: Voc [V]	48.48	48.67	48.86	49.05	49.24
Short Circuit Current: Isc [A]	11.47	11.52	11.56	11.60	11.63
Voltage at Maximum Power: Vmp [V]	39.89	39.95	40.00	40.19	40.37
Current at Maximum Power: Imp [A]	10.63	10.70	10.78	10.85	10.90

*STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5, Measuring Tolerance: $\pm 3\%$
*NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass 1.5, Wind Speed 1m/s

Electrical Properties (BSTC*) Bifacial gain > 10%

Power Output [Wp]	623	629	634	640	645
Voltage Mpp-Vmpp [V]	42.68	42.88	43.08	43.28	43.48
Current Mpp-Imp [A]	14.61	14.66	14.72	14.78	14.84
Voltage Open Circuit-Voc [V]	51.04	51.24	51.44	51.64	51.84
Short Circuit Current-Isc [A]	15.64	15.68	15.72	15.77	15.81
Module Efficiency [%]	24.1	24.3	24.5	24.7	24.9

*BSTC: Front side irradiance 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25°C
*Bifaciality=Pmax, rear/Rated Pmax, front

Temperature Parameters

Temperature Coefficient (Pmax)	-0.30%/°C
Temperature Coefficient (Voc)	-0.25%/°C
Temperature Coefficient (Isc)	+0.046%/°C
NMOT	45 $\pm$ 2°C

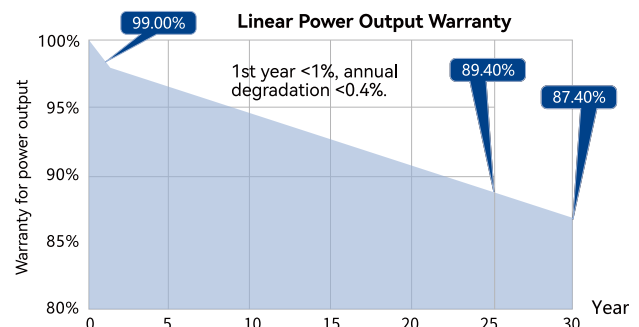
Maximum Ratings

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0 ~ +5W
Maximum Bifaciality	80 $\pm$ 5%

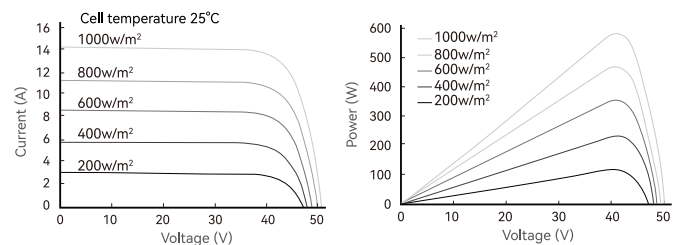
Mechanical Parameters

Cells	N Type Monocrystalline Cell
Cell Orientation	144[6X24]
Dimension	2278X1134X30mm
Weight	32.7kg
Front Glass	2.0mm high transmittance, 2mm anti-reflective surface tempered solar glass
Rear Glass	2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+400mm, -200mm, length can be customized
Wind / Snow Load	2400Pa/5400Pa
Packaging	36pcs per pallet, 720pcs per 40'HC

Warranty



I-V Curve



Certifications

Quality Management System and Product Certification

ISO 9001:2015 / quality management system
ISO 14001:2015 / environmental management system
ISO 45001:2018 / occupation health safety management system
IEC 61215/61730



More Than 40 Years Manufacturing
Experience Of Baolite Group Since 1982

