



PERLIGHT SOLAR
Powering Possibilities

PERLIGHT SOLAR CO.,LTD.
www.perlight.com

**P-type Half-cell
Bifacial Module**

PLM-550DH8M-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
560W+



15

YEAR
Materials
Warranty

30

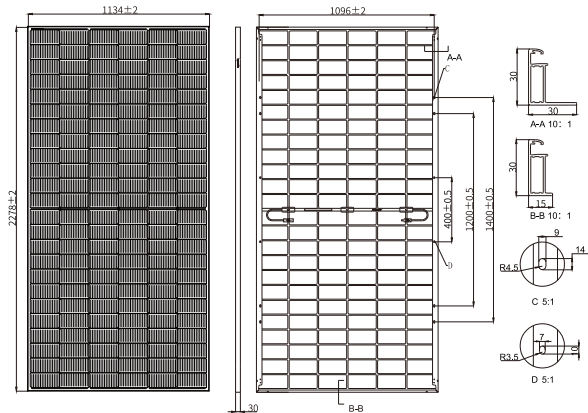
YEAR
Power
Warranty

- 2% First year degradation
- 0.55% Annual degradation
- 82.05% Power in year 30





Drawings (Unit: mm)



Mechanical Parameters

Cells	P Type Monocrystalline Cell
Cell Orientation	144[6X24]
Dimension	2278X1134x30mm
Weight	31.5kg
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

Electrical Characteristics (STC)

Maximum Power: Pmax [W]	540	545	550	555	560
Open Circuit Voltage: Voc [V]	49.70	49.90	50.10	50.30	50.50
Short Circuit Current: Isc [A]	13.78	13.83	13.88	13.93	13.98
Voltage at Maximum Power: Vmp [V]	41.56	41.76	41.96	42.16	42.36
Current at Maximum Power: Imp [A]	13.00	13.05	13.11	13.17	13.23
Module Efficiency: η [%]	20.9	21.1	21.3	21.5	21.7

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	408.6	412.4	416.2	420.0	423.8
Open Circuit Voltage: Voc [V]	46.48	46.74	47.01	47.28	47.47
Short Circuit Current: Isc [A]	11.04	11.08	11.12	11.16	11.20
Voltage at Maximum Power: Vmp [V]	38.45	38.67	38.90	39.12	39.31
Current at Maximum Power: Imp [A]	10.62	10.66	10.70	10.74	10.79

*STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: ±3%
*NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

Electrical Properties (BSTC*) Bifacial gain > 10%

Power Output [Wp]	596	601	607	612	618
Voltage Mpp-Vmpp [V]	41.56	41.76	41.96	42.16	42.36
Current Mpp-Imp [A]	14.35	14.40	14.46	14.53	14.60
Voltage Open Circuit-Voc [V]	49.70	49.90	50.10	50.30	50.50
Short Circuit Current-Isc [A]	15.21	15.26	15.32	15.37	15.43
Module Efficiency [%]	23.0	23.2	23.5	23.7	23.9

*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

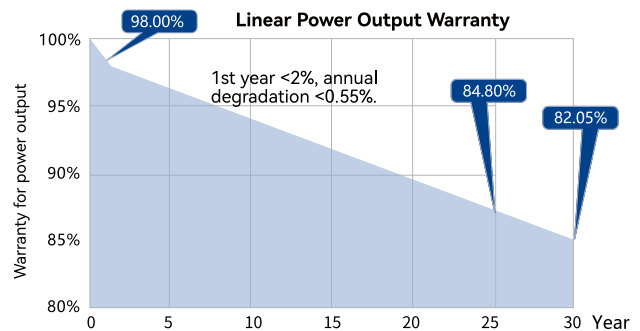
Temperature Parameters

Temperature Coefficient (Pmax)	-0.33%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.05%/°C
NMOT	45±2°C

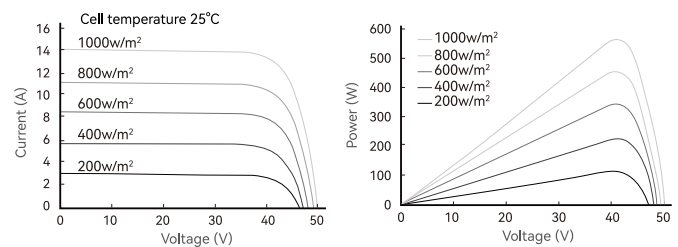
Maximum Ratings

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	±3%
Maximum Bifaciality	70±5%

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

