



PERLIGHT SOLAR
Powering Possibilities

PERLIGHT BC 660W

PLM-660DH8NGY-144

HPBC Cell BC Module

24.43%
Efficiency

30-YEAR
Warranty

HPBC
CELL

MODULE FEATURES



Maximum Efficiency of 24.43%

Powered by advanced Back Contact cell technology that maximizes light absorption.



Seamless Look

The Back Contact design eliminates front-side busbars, offering a sleek, modern look that enhances the visual appeal of any installation.



Simple design & Better Low-Light Performance

Enjoy reliable energy production even on cloudy or foggy days. The simple design further maximises light capture, boosting power generation.



Superior Temperature Management

Benefit from a low temperature coefficient and better thermal management, ensuring consistent performance even in hot climates.



High Power Density and Versatile Installation

Maximize your energy output with high power density panels, ideal for installations with limited space.



Enhanced Durability and Reliability

30-year warranty and reinforced structural integrity, these panels are built to last, offering long-term reliability and sustained performance.

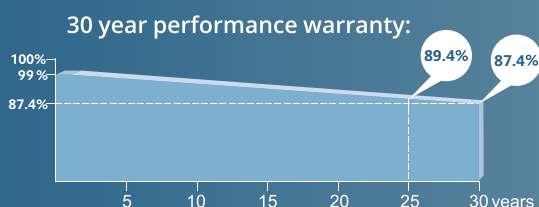
EXTENDED POWER OUTPUT WARRANTY

15

years limited
product
warranty

30

years
performance
warranty



QUALITY MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

IEC61215/61730, IEC62804(PID), IEC61701 (Salt),
IEC62716 (Ammonia), IEC60068-2-68 (Sand)

ISO 9001:2015 / quality management system

ISO 14001:2015 / environmental management system

ISO 45001:2018 / occupation health safety management system

ISO 50001:2011 / energy management system

IEC TS 62941 - 2016 / PV industry quality management system

ETHICAL MANUFACTURING STANDARDS



The SA8000® Standard helps secure ethical working conditions for millions of workers globally. Established by Social Accountability International, the Standard leverages the power of businesses and consumers to purchase products or services from workplaces that enrich the livelihoods of people.

As a Sedex member we are committed to being a responsible business, sourcing responsibly, and improving ethical standards and working conditions within the supply chain.

Sedex | Member



EcoVadis is a globally recognized corporate sustainability performance assessment standard.



ELECTRICAL CHARACTERISTICS (STC)

Module Type:	PLM-660DH8NGY-144		
Maximum Power - P _m (W)	650	655	660
Open Circuit Voltage - V _{oc} (V)	54.22	54.32	54.42
Short Circuit Current - I _{sc} [A]	15.14	15.22	15.30
Maximum Power Voltage - V _m [V]	44.87	44.97	45.07
Maximum Power Current - I _m [A]	14.49	14.57	14.65
Module Efficiency - η [%]	24.06	24.24	24.43

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power - P _m (W)	494.8	498.6	502.4
Open Circuit Voltage - V _{oc} (V)	51.53	51.62	51.72
Short Circuit Current - I _{sc} [A]	12.16	12.22	12.29
Maximum Power Voltage - V _m [V]	42.64	42.74	42.83
Maximum Power Current - I _m [A]	11.61	11.68	11.75

Note: 1. Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; cell temperature 25°C according to EN 60904-3;
2. NMOT: Irradiance 800 W/m²; wind speed 1 m/s; ambient temperature 20°C;
3. Tolerance of P_m: $\pm 3\%$; Measuring uncertainty of power: $\pm 3\%$; Performance deviation of V_{oc} [V], I_{sc} [A], V_m [V] and I_m [A]: $\pm 3\%$

MECHANICAL PARAMETERS

Dimensions	2382 x 1134 x 30 mm
Weight	33.5 kg
Glass	Double glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized Aluminium Alloy
Cells	Half-Cell HPBC Mono Black
Number of Cells	144 (6×24)
Junction Box	IP 68 (3 Diode)
Cable	+400mm, -200mm, length can be customized

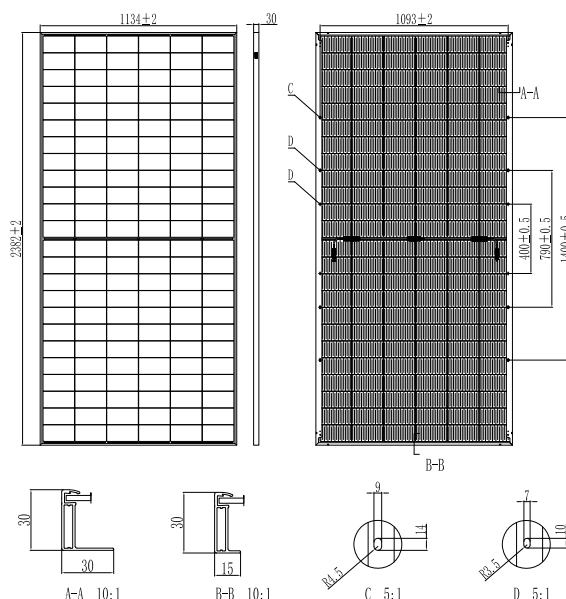
TEMPERATURE PARAMETERS

NOCT	45°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of V _{oc}	-0.23%/°C
Temperature Coefficient of I _{sc}	+0.05%/°C
Temperature Coefficient of P _m	-0.29%/°C

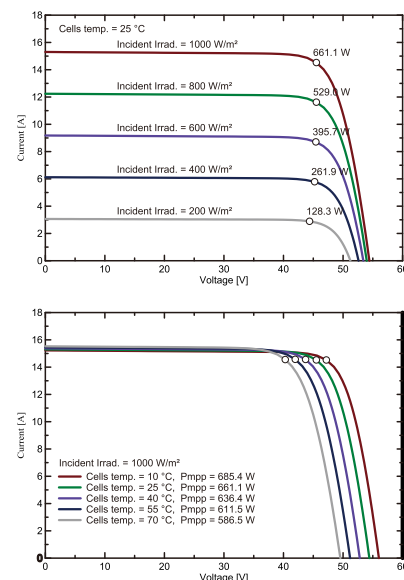
MAXIMUM RATINGS

Maximum System Voltage [V]	1500V DC (IEC)
Maximum Series Fuse Rating [A]	25
Maximum Surface Load Capacity [Pa]	Front 5400 / Back 2400
Temperature Range [°C]	-40 ~ +85
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s
Power Tolerance	$\pm 3\%$

DRAWINGS



I-V CURVE



PACKAGING CONFIGURATION

Packing Type	40'HQ
Piece / Pallet	36
Piece / Container	720

CLAMPING ZONES

Long Side	500mm to 600mm from edge
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