

Photowatt®

PW72LHT-CB-XF

SUPER HIGH POWER BIFACIAL POLY PERC MODULE

Thanks to the bifacial cell technology and extensive know-how in the manufacture of double-glass modules, we have developed a new generation of high-efficiency bifacial modules up to 430Wp. Photowatt® has been a pioneer in the solar energy industry for 40 years.

430 - 390 Wp

Typical power

19.2 %*

Typical efficiency

144 half-cells

Multicrystalline module

CO₂

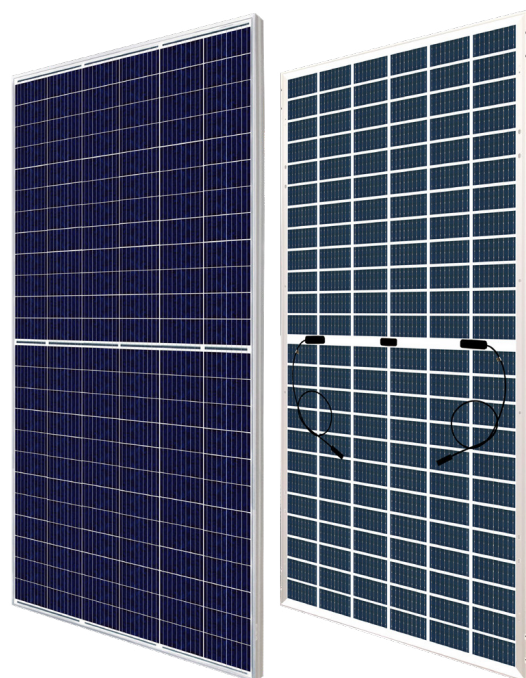
Low-carbon footprint

0/+5 Wc

Power tolerance

5400 Pa

Load resistance



French know-how

- Since 1979, our know-how has been evolving to meet market requirements, always manufacturing high performance, high quality and environmentally responsible products.



Environmental standards

- Priority over environmental requirements by limiting the carbon footprint
- Recycling of used panels (Photowatt is co-founder of Soren)



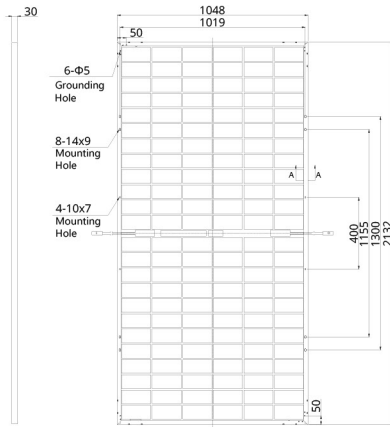
Durability and performance

- Modules certified by international organizations (VDE)
- Better performance thanks to anti-reflective glass
- Cells sorted by reverse current and shunt resistance
- Better power thanks to the spacing uniform and optimized between cells

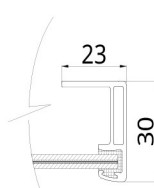
* excluding potential gains from bifaciality

I/V CURVES AT LOW IRRADIANCES AND DIFFERENT TEMPERATURES

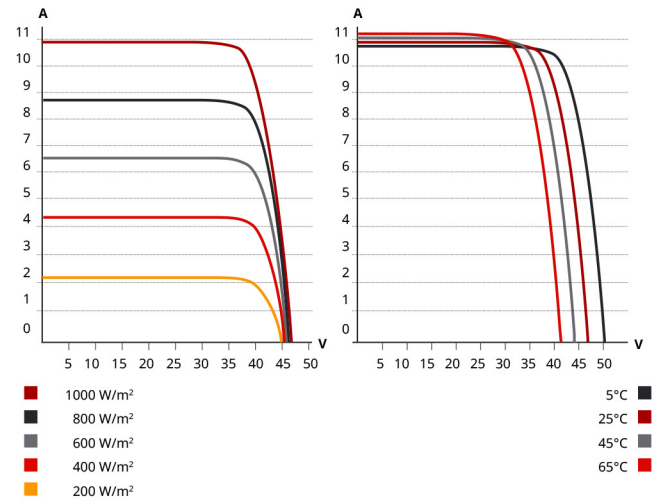
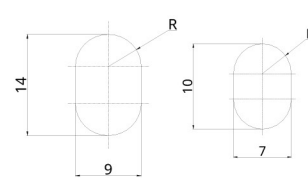
Rear View



Frame Cross Section A-A



Mounting Hole



MECHANICAL CHARACTERISTICS

Cell type	Multicrystalline
Module size	2132 x 1048 x 30 mm
Cells number	144 [2 x (6 x 12)]
Module weight	28.4 kg
Front cover	2.0 mm heat-strengthened glass
Frame material	Anodized aluminum alloy
J-BOX	IP68, 3 bypass diodes
Solar cables	Customized length*
Connector type	Series T4 or MC4-EVO2 or H4 UTX
Per Pallet	33 pieces
Per Container (40'HQ)	660 pieces

* For detailed information, please contact your local EDF ENR PWT sales representatives.

OPERATING CONDITIONS

Operating temperature	-40°C to +85°C
High resistance to snow and wind load	5400 Pa (Snow) 3600 Pa (Wind)
Maximum system voltage	1000V or 1500V (IEC)
Fire resistance	Type 29 (UL 61730) or Class C (IEC 61730)
Maximal serie fuse rating	25 A
Application classification	Class A
Bifaciality coefficient	70%

* Power Bifaciality = $P_{max_{rear}} / P_{max_{front}}$ both $P_{max_{rear}}$ and $P_{max_{front}}$ are tested under STC, Bifaciality Tolerance: $\pm 5\%$

TEMPERATURE COEFFICIENT*

Typical cells temperature NOCT	°C	41 (± 3 °C)
Temperature coefficient Pmax	γ	-0,34 %/°C
Temperature coefficient Voc	β	-0,26 %/°C
Temperature coefficient Isc	α	+0,05 %/°C

* 1000 W/m²; temperature 25°C; spectrum AM 1,5

WARRANTY

Product warranty	10 years
Linear power output warranty*	30 years

* See general warranty terms and conditions

TECHNICAL CHARACTERISTICS (STC*)

	Nominal Max. Power (Pmax)	Opt. Operating Voltage(Vmp)	Opt. Operating Current (Imp)	Open circuit voltage (Voc)	Short circuit current (Isc)	Module Efficiency
PW72LHT-CB-XF-390	390 W	38.3 V	10.19 A	46.8 V	10.74 A	17.5 %
Bifacial Gain**	5 %	410 W	38.3 V	10.70 A	11.28 A	18.3 %
	10 %	429 W	38.3 V	11.21 A	11.81 A	19.2 %
	20 %	468 W	38.3 V	12.23 A	12.89 A	21.0 %
	30 %	507 W	38.3 V	13.25 A	13.96 A	22.7 %
PW72LHT-CB-XF-400	400 W	38.7 V	10.34 A	47.2 V	10.90 A	17.9 %
Bifacial Gain**	5 %	420 W	38.7 V	10.86 A	11.45 A	18.8 %
	10 %	440 W	38.7 V	11.37 A	11.99 A	19.7 %
	20 %	480 W	38.7 V	12.41 A	13.08 A	21.5 %
	30 %	520 W	38.7 V	13.44 A	14.17 A	23.3 %
PW72LHT-CB-XF-410	410 W	39.1 V	10.49 A	47.6 V	11.06 A	18.4 %
Bifacial Gain**	5 %	431 W	39.1 V	11.01 A	11.61 A	19.3 %
	10 %	451 W	39.1 V	11.54 A	12.17 A	20.2 %
	20 %	492 W	39.1 V	12.59 A	13.27 A	22.0 %
	30 %	533 W	39.1 V	13.64 A	14.38 A	23.9 %
PW72LHT-CB-XF-420	420 W	39.5 V	10.64 A	48.0 V	11.26 A	18.8 %
Bifacial Gain**	5 %	441 W	39.5 V	11.17 A	11.82 A	19.7 %
	10 %	462 W	39.5 V	11.70 A	12.39 A	20.7 %
	20 %	504 W	39.5 V	12.77 A	13.51 A	22.6 %
	30 %	546 W	39.5 V	13.83 A	14.64 A	24.4 %
PW72LHT-CB-XF-430	430 W	39.9 V	10.78 A	48.4 V	11.32 A	19.2 %
Bifacial Gain**	5 %	452 W	39.9 V	11.33 A	11.89 A	20.2 %
	10 %	473 W	39.9 V	11.86 A	12.45 A	21.2 %
	20 %	516 W	39.9 V	12.94 A	13.58 A	23.1 %
	30 %	559 W	39.9 V	14.01 A	14.72 A	25.0 %

*STC: 1000 W/m², spectrum 1.5 AM and cell temperature of 25°C.

** Bifacial gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle, etc.) and on the albedo of the ground.

ELECTRICAL DATA (NMOT*)

	Nominal Max. power (Pmax)	Opt. Operating Voltage(Vmp)	Opt. Operating Current (Imp)	Open circuit voltage (Voc)	Short circuit current (Isc)
PW72LHT-CB-XF-390	292 W	35.8 V	8.15 A	44.1 V	8.66 A
PW72LHT-CB-XF-400	299 W	36.2 V	8.27 A	44.5 V	8.79 A
PW72LHT-CB-XF-410	307 W	36.5 V	8.39 A	44.8 V	8.92 A
PW72LHT-CB-XF-420	314 W	36.9 V	8.51 A	45.2 V	9.08 A
PW72LHT-CB-XF-430	321 W	37.3 V	8.62 A	45.6 V	9.13 A

* Below the nominal operating temperature of the module: NMOTz (energy illumination of 800 W / m², spectrum AM 1.5, ambient temperature 20 °C, wind speed 1 m / s)

