

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 435Wp. Photowatt® has been a pioneer in the solar energy industry for 40 years.

435-395 Wp

Typical power

25.3 %*

Typical efficiency

144 half-cells

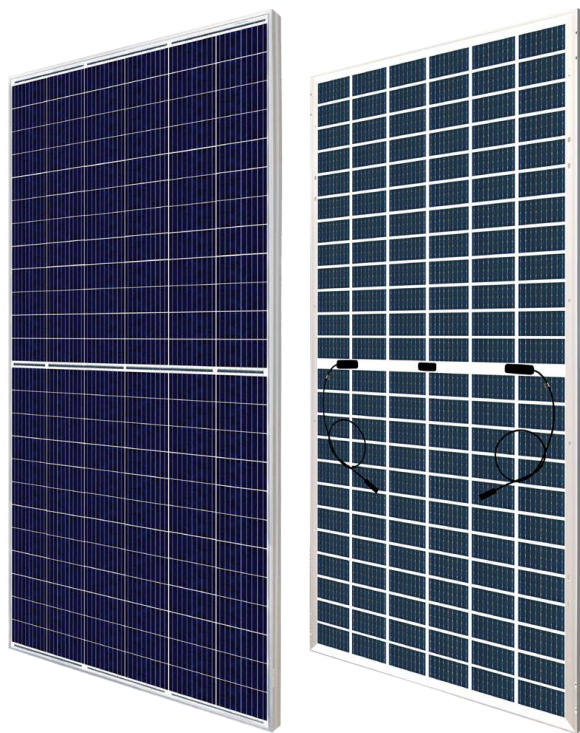
Multicrystalline module

CO₂

Low-carbon footprint

0/+5 Wp

Power tolerance



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

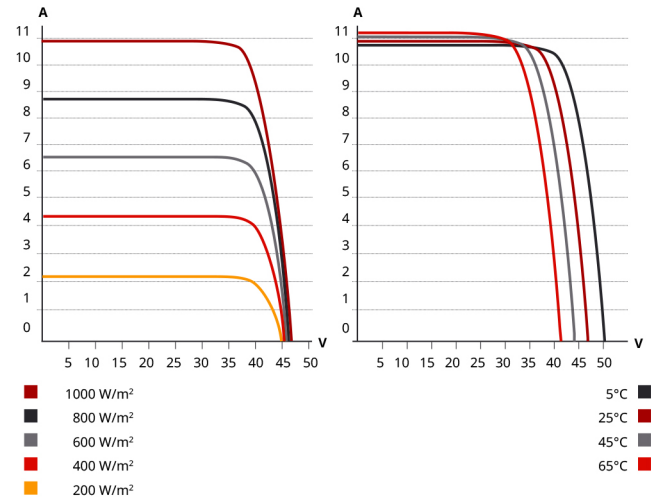


Highly resistant and light framing

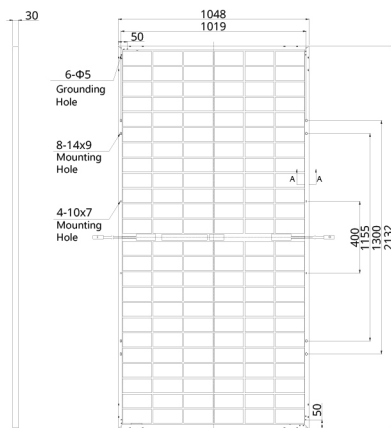
- Aluminum frame for resistance to extreme climatic conditions (5400Pa)
- Frost resistant frame
- Weight of module for easy handling

* with 30% more efficiency from the back side

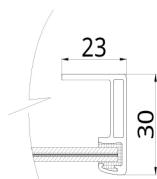
I/V CURVES AT LOW IRRADIANCES AND DIFFERENT TEMPERATURES



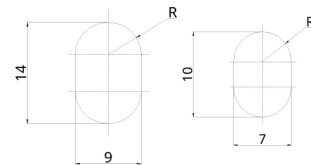
Rear View



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	4.0 mm ² (IEC), 12 AWG (UL), 400 mm (15.7 in) (+)/ 280 mm (11.0 in) (-) or 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: $\pm 5\%$

ELECTRICAL DATA (NMOT*)

	Maximum rated power (Pmax)	Voltage nominal (Vmp)	Nominal power intensity (Imp)	Open circuit voltage (Voc)	Short circuit current (Isc)
PW72LHT-CB-XF-395	295 W	36.0 V	8.21 A	44.3 V	8.72 A
PW72LHT-CB-XF-405	303 W	36.3 V	8.33 A	44.7 V	8.85 A
PW72LHT-CB-XF-415	310 W	36.7 V	8.45 A	45.0 V	8.98 A
PW72LHT-CB-XF-425	318 W	37.1 V	8.57 A	45.4 V	9.10 A
PW72LHT-CB-XF-435	325 W	37.5 V	8.68 A	45.8 V	9.15 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)

TEMPERATURE COEFFICIENT*

Typical cells temperature NOCT	°C	41 (±3 °C)
Temperature coefficient Pmax	γ	-0,36%/°C
Temperature coefficient Voc	B	-0,28%/°C
Temperature coefficient Isc	α	+0,05%/°C

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

TECHNICAL CHARACTERISTICS (STC*)

	Typical power (Pmax)	Voltage at the point of maximum power (Vmp)	Current at the point of maximum power (Imp)	Open circuit voltage (Voc)	Short circuit current (Isc)	Module Efficiency
PW72LHT-CB-XF-395	395 W	38.5 V	10.26 A	47 V	10.82 A	17.7%
Bifacial Gain**	5%	415 W	38.5 V	10.77 A	47 V	18.6%
	10%	435 W	38.5 V	11.29 A	47 V	19.5%
	20%	474 W	38.5 V	12.31 A	47 V	21.2%
	30%	514 W	38.5 V	13.34 A	47 V	23.0%
PW72LHT-CB-XF-405	405 W	38.9 V	10.42 A	47.4 V	10.98 A	18.1%
Bifacial Gain**	5%	425 W	38.9 V	10.94 A	47.4 V	19.0%
	10%	446 W	38.9 V	11.46 A	47.4 V	20.0%
	20%	486 W	38.9 V	12.50 A	47.4 V	21.8%
	30%	527 W	38.9 V	13.55 A	47.4 V	23.6%
PW72LHT-CB-XF-415	415 W	39.3 V	10.56 A	47.8 V	11.14 A	18.6%
Bifacial Gain**	5%	436 W	39.3 V	11.09 A	47.8 V	19.5%
	10%	457 W	39.3 V	11.62 A	47.8 V	20.4%
	20%	498 W	39.3 V	12.67 A	47.8 V	22.3%
	30%	540 W	39.3 V	13.73 A	47.8 V	24.2%
PW72LHT-CB-XF-425	425 W	39.7 V	10.71 A	48.2 V	11.29 A	19.0%
Bifacial Gain**	5%	446 W	39.7 V	11.25 A	48.2 V	20.0%
	10%	468 W	39.7 V	11.79 A	48.2 V	20.9%
	20%	510 W	39.7 V	12.85 A	48.2 V	22.8%
	30%	553 W	39.7 V	13.93 A	48.2 V	24.8%
PW72LHT-CB-XF-435	435 W	40.1 V	10.85 A	48.6 V	11.35 A	19.5%
Bifacial Gain**	5%	457 W	40.1 V	11.40 A	48.6 V	20.5%
	10%	479 W	40.1 V	11.95 A	48.6 V	21.4%
	20%	522 W	40.1 V	13.02 A	48.6 V	23.4%
	30%	566 W	40.1 V	14.12 A	48.6 V	25.3%

* Under standard test conditions (STC) of irradiance of 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.

WARRANTY

Product warranty	10 years
Linear power output warranty*	30 years

* See general warranty terms and conditions

QUALITY CERTIFICATES

MANAGEMENT



PRODUCT

