

Photowatt®

PW72LHT-C

THE HIGH POWER MONOLIKE PERC MODULE

With Photowatt industry leading Crystal Advanced-PERC cell technology and the innovative LIC (Low Internal Current) module technology, we are now able to offer our global customers high power monolike modules up to 435 Wp. Photowatt® has been a pioneer in the solar-energy industry for 40 years.

435 - 395 Wp
Typical power

19.7 %
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)

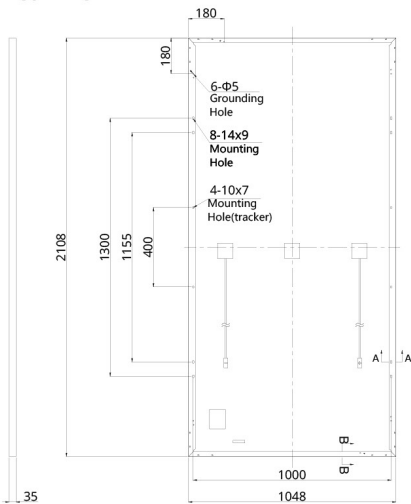


Durability and performance

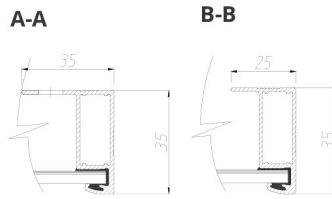
- Modules certified by international organizations (VDE)
- Better performance thanks to anti-reflective glass
- Cells sorted by reverse current and shunt resistance
- Better power thanks to the spacing uniform and optimized between cells

I/V CURVES AT LOW IRRADIANCES AND DIFFERENT TEMPERATURES

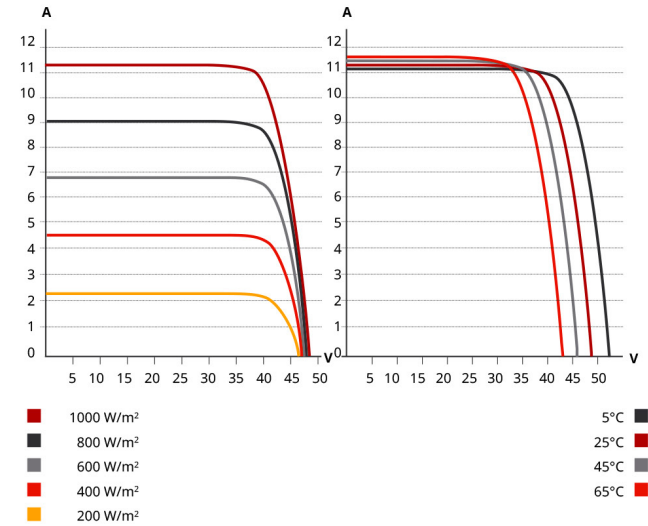
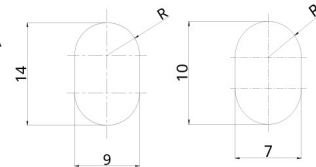
Rear View



Frame Cross Section



Mounting Hole



MECHANICAL CHARACTERISTICS

Cell type	Multicrystalline
Module size	2108 x 1048 x 35 mm
Cells number	144 [2x (6 x 12)]
Module weight	24.3 kg
Front cover	3.2 mm tempered glass
Frame material	Anodized aluminum alloy
J-BOX	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
Cable lenght	1400 mm or customized length *
Per Pallet	30 pieces
Per Container (40'HQ)	660 pieces

* For detailed information, please contact your local EDF ENR PWT and technical 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 1 (UL 61730) or Type 2 (UL 61730 or Classe C (IEC 61730)
Maximal serie fuse rating	20 A
Application classification	Class A

WARRANTY

Product warranty	10 years
Linear power output warranty *	25 years

* See general warranty terms and conditions

TECHNICAL CHARACTERISTICS (STC*)

Typical power	W	435	430	425	420	415	410	405	400	395
Power tolerance	W	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Voltage at typical power	V	40.1	39.9	39.7	39.5	39.3	39.1	38.9	38.7	38.5
Current at typical power	A	10.85	10.78	10.71	10.64	10.56	10.49	10.42	10.34	10.26
Open circuit voltage	V	48.6	48.4	48.2	48.0	47.8	47.6	47.4	47.2	47.0
Short circuit current	A	11.35	11.32	11.29	11.26	11.14	11.06	10.98	10.90	10.82
Module conversion efficiency	%	19.7	19.5	19.2	19.0	18.8	18.6	18.3	18.1	17.9

* Under Standard Test Conditions : STC (1000 W/m²; spectrum AM 1.5; cell temperature 25°C)

TECHNICAL CHARACTERISTICS (NMOT*)

Typical power	W	435	430	425	420	415	410	405	400	395
Maximum power	W	325	321	318	314	310	307	303	299	294
Voltage at maximum power	V	37.5	37.3	37.1	36.9	36.7	36.5	36.3	36.2	35.8
Current operating income	A	8.68	8.62	8.57	8.51	8.45	8.39	8.33	8.27	8.21
Open circuit voltage	V	45.8	45.6	45.4	45.2	45.0	44.8	44.7	44.5	44.1
Short circuit current	A	9.15	9.13	9.10	9.08	8.98	8.92	8.85	8.79	8.73

* Under Nominal Module Operating Temperature : NMOT (800 W/m²; 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 V _{oc}	β	-0,28 %/°C
Temperature coefficient I _{sc}	α	+0,05 %/°C

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

