

# Photowatt®

## PW60HT-CP

### THE HIGH POWER PHOTOVOLTAIC MODULE

The latest addition to the Photowatt® range, the Crystal Advanced PW60HT-CP module benefits from the latest innovations in PERC and half-cell technologies for optimal surface efficiency. Photowatt has been a pioneer in the solar industry for over 40 years.

**320-280 Wc**

Typical power

**19.3 %**

Typical efficiency

**120 half cells**

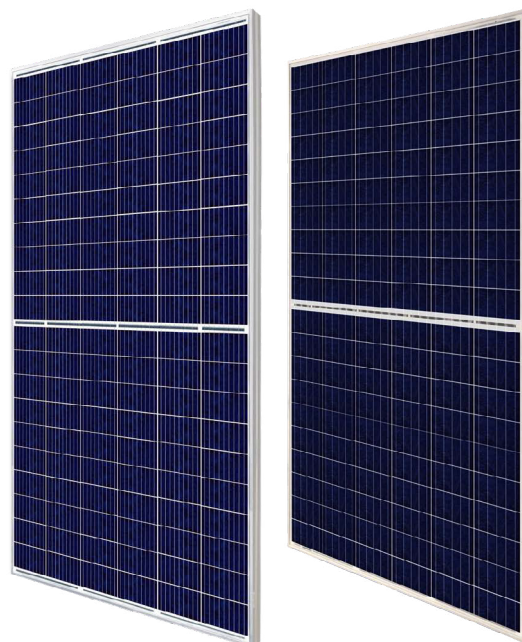
Multicrystalline module

**CO<sub>2</sub>**

Low-carbon footprint

**0/+5 Wc**

Power tolerance



MBB

5BB

\* Black frame product can be supplied on request



### Environmental standards

- Priority on environmental requirements by limiting the carbon footprint
- Recycling of used panels (Photowatt is co-founder of PV Cycle France)



### Durability and performance

- Modules certified by international laboratories (VDE)
- Anti-reflective coated glass to maximize power output
- Cells sorting according to reverse current and shunt resistance
- Better power thanks to uniform and optimized spacing between cells



### Highly resistant and light framing

- Aluminium frame for resistance to extreme weather conditions (5400Pa)
- Frame resistant to gel damage
- Module weight for easy handling

## MECHANICAL CHARACTERISTICS

Cell type	Multicristalline
Module size	1675 x 992 x 35 mm
Cell size	156.75 x 78.38 mm
Cell number	120 [2x(10x6)]
Module weight	18.5 kg
Front cover	3.2 mm tempered glass
Fram material	Anodized aluminum alloy
J-BOX	IP 68, 3 diodes
Solar cables	4.0 mm <sup>2</sup> & 12 AWG, 1160mm
Connector type	T4 series or MC4-EVO2 or H4 UTX
Per pallet	30 pieces
Per container	840 pieces

## OPERATING CONDITIONS

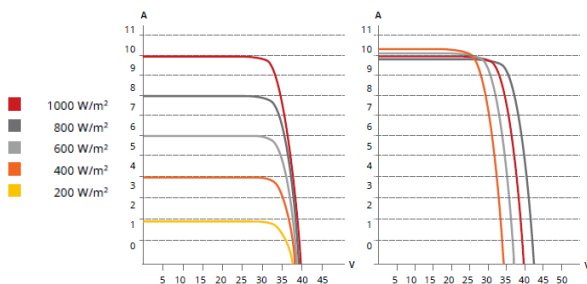
Operating temperature	-40°C to +85°C
High resistance to snow and wind load	5400 Pa (Snow) 2400 Pa (Wind)
Maximum system voltage	1000V or 1500V (IEC)
Maximal serie fuse rating	30A
Application classification	Class A

## TEMPERATURE COEFFICIENT\*

Typical cells temperature NOCT	°C	42 (±3 °C)
Temperature coefficient Pmax	γ	-0,36%/°C
Temperature coefficient Voc	β	-0,28%/°C
Temperature coefficient Isc	α	+0,05%/°C

\* 1000 W/m<sup>2</sup> ; temperature de 25°C ; spectrum AM 1,5

## I/V CURVES AT LOW IRRADIANCES AND DIFFERENT TEMPERATURES



## TECHNICAL CHARACTERISTICS (STC\*)

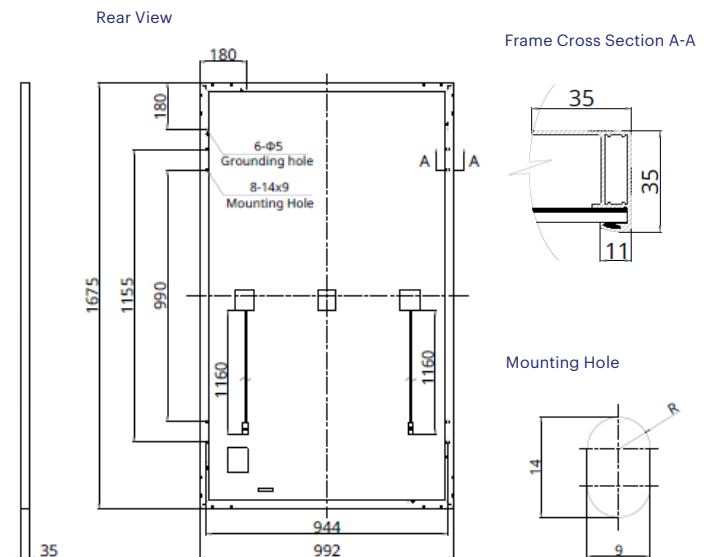
Typical power	W	320	315	310	305	300	295	290	285	280
Power tolerance	W	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Voltage at typical power	V	33.5	33.3	33.1	32.9	32.7	32.5	32.3	31.4	31.2
Current at typical power	A	9.56	9.46	9.37	9.28	9.18	9.08	8.98	9.08	8.98
Open circuit voltage	V	40.1	39.9	39.7	39.5	39.3	39.1	38.9	38.1	37.9
Short circuit current	A	9.97	9.89	9.81	9.73	9.65	9.57	9.49	9.56	9.47
Module conversion efficiency	%	19.3	19.0	18.66	18.36	18.05	17.75	17.45	17.15	16.85

\* Rated Characteristics under Standard Test Conditions (STC : 1000 W/m<sup>2</sup> ; spectrum AM 1,5 ; cell temperature 25°C)

## TECHNICAL CHARACTERISTICS (NMOT\*)

Typical power	W	320	315	310	305	300	295	290	285	280
Maximum power	W	238	235	230	227	223	219	214	211	207
Voltage at maximum power	V	31.2	31.0	30.8	30.6	30.4	30.2	29.8	29	28.8
Current operating income	A	7.64	7.57	7.49	7.42	7.34	7.26	7.18	7.26	7.18
Open circuit volatge	V	37.7	37.5	37.2	37.0	36.8	36.7	36.2	35.5	35.3
Short circuit current	A	8.04	7.98	7.91	7.85	7.78	7.72	7.66	7.72	7.64

\* Rated data under conditions: NMOT (800 W/m<sup>2</sup>; ambient temperature 20°C; wind speed 1 m/s)



## WARRANTY

Product warranty	10 years
Linear power output warranty*	25 years

\* See general warranty terms and conditions

## QUALITY CERTIFICATES

MANAGEMENT



PRODUCT

