

MONOCRYSTALLINE HEE215M Full Black 270 Watt

The solar module HEE215M Full Black is manufactured with high efficiency cells made by industry leading suppliers to guarantee a long lasting reliable power output. Robots allocate the 3 Bus Bar monocrystalline cells equally and interconnect the ribbon efficiently. The lightly textured glass of great optical transmission and diffused light collection covers the homogenous colored cells to create an esthetic module layout of high performance and quality design. The double reinforced anodized aluminum frame makes a rigid structure and flexible handling ideal for residential, commercial rooftop or ground mounted installations.



**HIGH
EFFICIENCY**



**FULL BLACK
(optional)**



3 BUS BAR



**RESISTANCE TO
ICE AND SNOW**



**LIGHTLY
TEXTURED GLASS**



**LOW IRRADIATION
CONDITION**



**PYRAMIDAL
GLASS (optional)**



60 CELLS



**4 mm GLASS
(optional)**



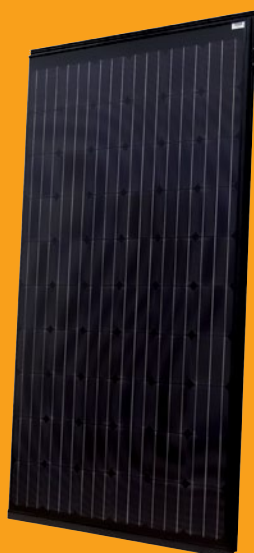
**HARD SOLDERED
JUNCTION BOX**



**12 YEAR
WARRANTY**



**5.400 Pa
LOADING CAPACITY**



HIGH POWER OUTPUT

- 240-260 Wp. Wide range of output
- Homogeneous esthetics
- Maximum reliability

DIMENSIONS

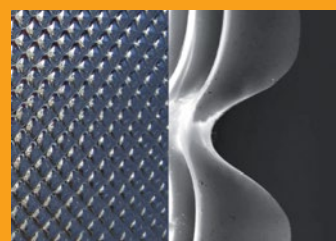
Length x Width: 1680 x 990 mm

Thickness: 40mm

Weight: 22 kg

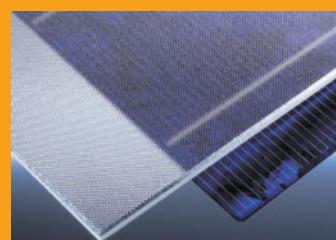
BIPV

Built in roof mounting systems providing maximum sealing.



PYRAMIDAL GLASS

The pyramidal structure of solar glass ensures high production at low radiation conditions and reduces the reflection of incident light. At vertical installation the annual energy output is increased by 10%.



LIGHTLY TEXTURED GLASS

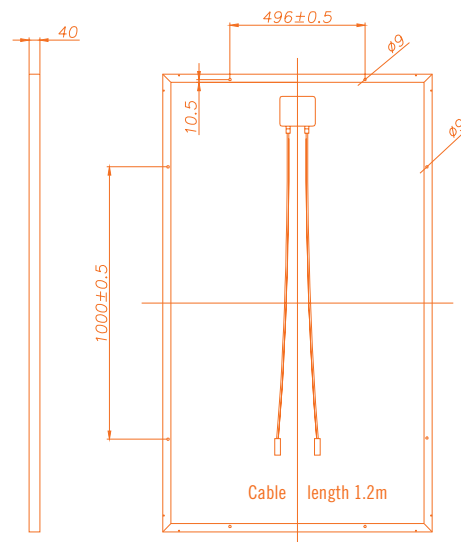
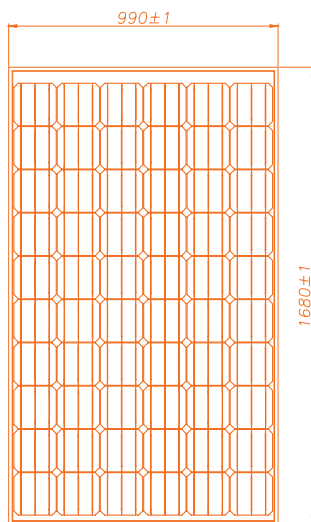
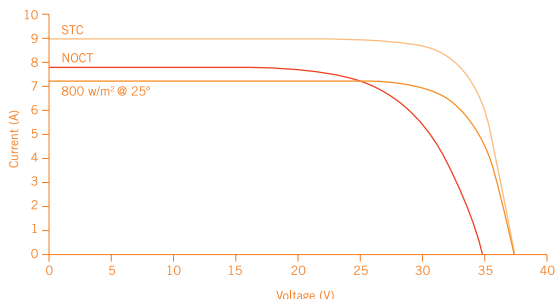
We use the lightly textured glass as our standard, which provides better properties on heat dissipation and reflection loss in comparison to plain usual solar glass.

SOLAR MODULE

HEE215M

Full Black

270 Watt



	HEE215MA72	HEE215MA71	HEE215MA69	HEE215MA68
POWER	270	265	255	250

STC (Standard Test Conditions)

Nominal power P_{MPP} (W)	270	265	255	250
Nominal voltage U_{MPP} (V)	31.25	31.05	30.65	30.3
Nominal current I_{MPP} (A)	8.64	8.55	8.32	8.22
Open circuit voltage V_{OC} (V)	38.15	37.9	37.5	37.4
Short circuit current I_{SC} (A)	9.05	8.97	8.86	8.72

STC: Irradiation 1000W/m² – Air mass AM 1.5 – Cell temperature 25°C

NOCT (Normal Operation Cell Temperature)

Nominal power P_{MPP} (W)	197	193	186	183
Nominal voltage U_{MPP} (V)	28.23	27.95	27.6	27.3
Nominal current I_{MPP} (A)	6.97	6.90	6.74	6.7
Open circuit voltage V_{OC} (V)	35.4	35.1	34.6	34.5
Short circuit current I_{SC} (A)	7.37	7.35	7.28	7.25

NOCT: Cell temperature (= 45°C) – Irradiation 800 W/m² – Wind speed 1m/s – Temperature 20°C

ELECTRICAL AND THERMAL CHARACTERISTICS

System tension (V): 1000	Temp. Coeff. V_{OC} (%/°C) -0.34	Temp. Coeff. P_{MPP} (%/°C) -0.43
Reverse current (A): 12	Temp. Coeff. I_{SC} (%/°C) +0.07	Operating temperature -40 till +85 °C

MECHANICAL FEATURES

Cells	60 in series, 3BB, 6"
Glass	Lightly textured, high transparency, anti-reflective, hardened
Back sheet	Multi-layer lamination PVF and PET
Frame	Anodized aluminum in standard module / BIPV assembling
Connection	2x1.1m of cable, MC4 type connectors
Junction box	Protection index IP65, 3 diodes by-pass

MEASURING TOLERANCES Pmax: +/-3%

Warranty: 12 years on manufacturing defects and 80% nominal power at 25 years

Any additional information can be supplied under request



Friendly to Environment.

Our packaging decomposition is biological and totally degradable.

Specifications are subject to change without notice. HELIOS ENERGY EUROPE S.L. (HELIENE) 05/2014

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