

**For a Free Quote:**

**Web: [EnergyPal.com/solar](http://EnergyPal.com/solar)**

**Call: 1-800-990-3725**

**Email: [contact@energypal.com](mailto:contact@energypal.com)**

# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Heliene  
HEE210U BIPV  
HEE210UA66**

Also available on the web at  
[EnergyPal.com/heliene-solar-panels/hee210ua66](http://EnergyPal.com/heliene-solar-panels/hee210ua66)

# POLYCRYSTALLINE HEE210U Innovative 255 Watt

The solar module HEE210U 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* polycrystalline 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 building in-roof solar system allows a correct BIPV installation which ensures a waterproof sealing for roof structures as well as mechanical seals and thermal resistance, needed to preserve the performance of the building envelope.



**HIGH EFFICIENCY**



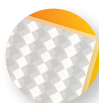
**60 CELLS**



**3 BUS BAR**



**RESISTANCE TO ICE AND SNOW**



**LIGHTLY TEXTURED GLASS**



**LOW IRRADIATION CONDITION**



**PYRAMIDAL GLASS (optional)**



**12 YEAR WARRANTY PRODUCT**



**HARD SOLDERED JUNCTION BOX**



**MOUNTING SYSTEM ELEMENTS**



## HIGH POWER OUTPUT

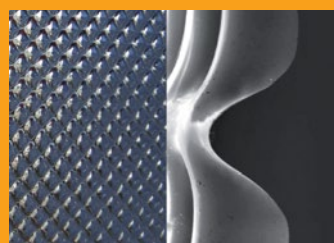
- 225-250 Wp. Wide range of output
- Homogeneous esthetics
- Maximum reliability

## DIMENSIONS

Length x Width: 1724 x 1015 mm  
Thickness: 25mm  
Weight: 19 kg

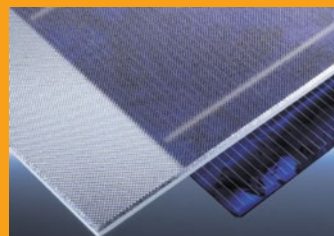
## BIPV

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%.

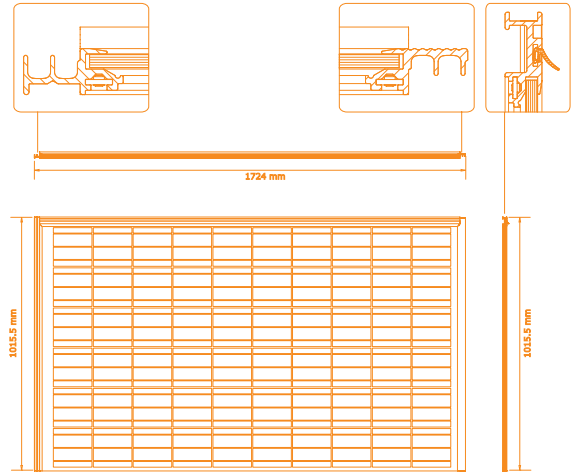
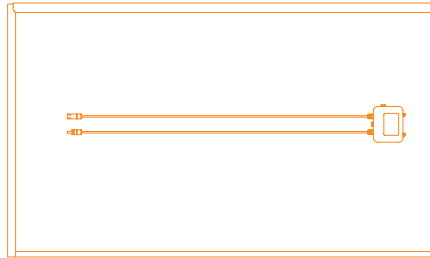
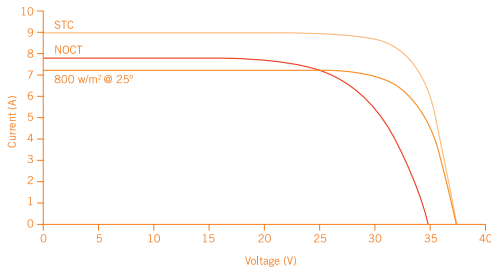


## LIGHTLY TEXTURED GLASS

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

# HEE210U Innovative 255 Watt



	HEE210UA69	HEE210UA68	HEE210UA67	HEE210UA66
<b>POWER</b>	<b>255</b>	<b>250</b>	<b>245</b>	<b>240</b>

### STC (Standard Test Conditions)

Nominal power $P_{MPP}$ (W)	255	250	245	240
Nominal voltage $U_{MPP}$ (V)	30.95	30.7	30.43	30.35
Nominal current $I_{MPP}$ (A)	8.20	8.14	8.05	7.91
Open circuit voltage $V_{OC}$ (V)	37.90	37.8	37.65	37.55
Short circuit current $I_{SC}$ (A)	8.71	8.65	8.56	8.55

STC: Irradiation 1000W/m<sup>2</sup> – Air mass AM 1.5 – Cell temperature 25°C

### NOCT (Normal Operating Cell Temperature)

Nominal power $P_{MPP}$ (W)	182	178	175	171
Nominal voltage $U_{MPP}$ (V)	27.23	27.08	26.84	26.77
Nominal current $I_{MPP}$ (A)	6.67	6.59	6.52	6.39
Open circuit voltage $V_{OC}$ (V)	34.10	33.93	33.8	33.69
Short circuit current $I_{SC}$ (A)	7.06	7.01	6.97	6.9

NOCT: Cell temperature in normal condition (= 45°) with Irradiation 800 W/m<sup>2</sup> – environmental temperature 20°C – Wind speed 1m/s.

### ELECTRICAL AND THERMAL CHARACTERISTICS

System tension (V): 1000	Temp. Coeff. $V_{OC}$ (%/°C) -0.32	Temp. Coeff. $P_{MPP}$ (%/°C) -0.42
Reverse current (A): 12	Temp. Coeff. $I_{SC}$ (%/°C) +0.07	Operating Temp. -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  $P_{max}$ : +/-3%

Warranty: 12 years for 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

#### HELIOS ENERGY EUROPE S.L.

Worldwide Headquarters  
Manufacturing and Sales

Pza. del Xarol, 13-15  
Pol. Ind. Les Guixeres  
08915 BADALONA (Barcelona)  
SPAIN  
PH. +34 93 313 61 62  
info@heliosenergy.es  
www.heliosenergy.es

#### HELIENE Inc

Manufacturing and Sales

520 Allen's Side Rd  
Sault Ste. Marie, ON  
CANADA  
www.heliene.ca

#### HELIOS USA

Manufacturing and Sales

1301 W Canal St.  
Milwaukee, WI 53233  
USA  
www.helios-usa.com

#### BIOSOLAR

Sales and Distribution

Opstalstraat, 21  
B-9620 Zottegem  
BELGIUM  
PH. +32 (0)9 349 36 20  
FAX. +32 (0)9 349 36 21  
www.heliene.nl  
www.heliene.be

#### BAES

Sales and Distribution

Block-D, Road 31,  
House-20, Shahjalal Upashahar  
Sylhet-3100, Bangladesh  
PH. 0821-712848  
www.baes-ltd.com