

# SGP-Hybrid Module



A new innovative Photovoltaic and Thermal Module which combines Day4 technology and Thermal collector. A new PVT module developed by Sitie Greenplant



## SGP-Hybrid235Wp to 255Wp Photovoltaic 862W Thermal



### Key Features

SGP-Hybrid: From the Day4 experience of the research and development of photovoltaic cells and panels of over 12 years with international patents and with installations for more than 200MW all over the world, Sitie has integrated a new approach for the construction of a single Hybrid module which combines PV electrical output and high efficiency thermal production.

Thanks to Guardian Technology the module is producing energy also when partially shadowed.

Thanks to the new Thermal collector the module will grant very high and reliable thermal source.

This panel is characterized by having the best price performance ratio on the market.

### Dimensions and Weight

- Dimensions (mm) 1650 x 1013 Tolerance +/-1.5 mm x 40.4 Tolerance +/-1.5
- 156x156 mm Poly-crystalline cell (6 inches), 60 cells
- Weight 28 kg
- Front Glass 3.2mm Low Iron, Static Loads: 5400Pa front, 2400Pa back
- Frame Anodized Aluminum Alloy
- Output Cable 2 x 4.0 mm 1000mm, MC IV Compatible Connectors

### PV Specifications

(*)	Module Type: SGP-Hybrid-xxx	235 W/p	240 W/p	245 W/p	250 W/p
	Peak power W/p	235	240	245	245
	Open circuit voltage Voc [V]	36.37	36.39	36.41	36.47
	Max. power voltage Vmp [V]	29.92	30.08	30.11	30.15
	Max. power current Imp [A]	6.28	6.39	6.51	6.59
	Short circuit current Isc [A]	6.81	6.83	6.86	6.91

(\*) Data subject to change without notice

## Specifications

Operating temperature [C°] -40°C + 85°C

Max. Syst. Voltage [V] 1000V DC

Max. Series Fuses Rating 15A

Positive Power Classes sorting: -0/+5Wp

NOCT 42.3°C

Temperature Coefficient of Pmax -0.44%/K

Temperature Coefficient of Voc -0.10V/K

Temperature Coefficient of Isc +2.67mA/K

STC Irradiance 1000W/m<sup>2</sup>, Cell Temp. 25°C, AM: 1.5

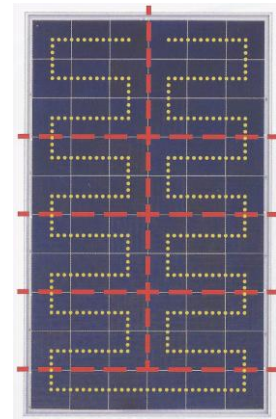
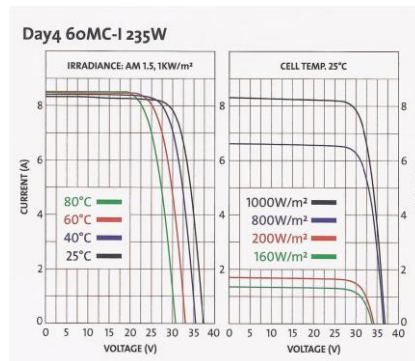
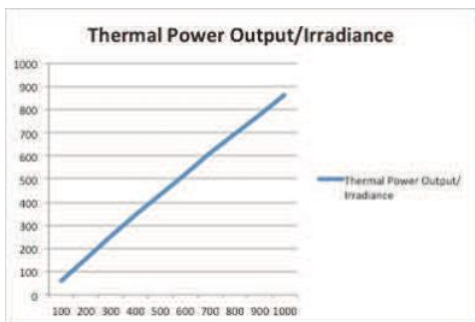
Power Warranty: Linear 10 years >= 90%; 25 years >= 80%

Products subject to changes, please contact Day4 Europe for latest specs

## SGP-Hybrid

Main features:

- Low metallization solar cell technology, Industry leading power collection, High efficiency in low light conditions
- 3 times less sensitivity to shading and debris
- Microcrack resistant cell technology, Thermal stress relief encapsulation technology and Reliable PV cell interconnection – over 2100 independent electrical contacts on each cell
- High efficiency thermal collector with very low thermal gradient to improve heat transfer to liquid collector
- 9+1 by-pass diodes
- Reduction electric eff. from 1000W/m to 200W/m : <4%<sup>2</sup>



## Warranty & Certifications

- Module Name Registration: SGP-Hybrid-xxx
- Model Type xxx = power class, eg SGP-Hybrid-240, SGP-Hybrid-245...
- 25 years production performance warranty >= 80%
- 12 years production performance warranty >= 90%
- 10 years of warranty on materials and workmanship
- ISO 9001:2008
- ISO 14001
- IEC 61730
- IEC 61215
- EN 12975-2

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