



GREEN ENERGY SOLUTIONS



GES-S120/FNH

325-345W

120-CELL HALF CUT MONOCRYSTALLINE SOLAR MOUDLE

Artikel-Nr.: 345-1.2023-C35-350

20.4%

Module Efficiency

345W

Highest Power Output

12 YEARS

Material & Workmanship Warranty


25 YEARS

Linear Power Warranty

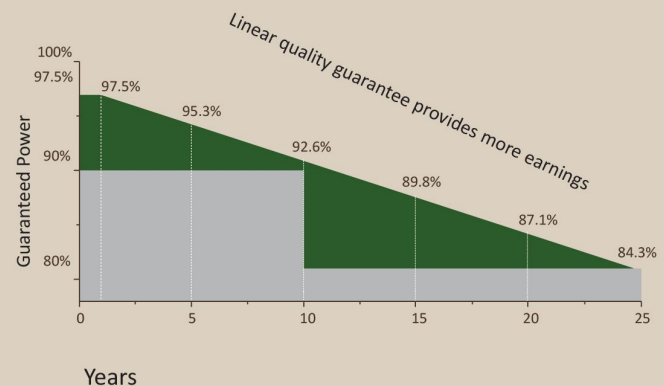
-2.5% First year power degradation



-0.55% Annual degradation

PRODUCT ADVANTAGES

-  **High Efficiency**
Module efficiency leading in industry, up to 20.4%
-  **High Reliability**
Passed 3*IEC standard test
-  **Low Hot-spot Risk**
1/2 current, reducing the hot spot temperature
-  **Excellent loading capability**
2400Pa wind loads, 5400Pa snow loads, 8000Pa extra support
-  **Low NMOT**
As low as 43°C, improving the power generation efficiency
-  **Half Cell, 5BB PERC Technology**
More reliable soldering technology, reduce possibility of hot spot

PRODUCT GUARANTEE



-  Standard linear power guarantee
-  VDS linear power guarantee

Certifications of Product and Manufacturer



Green Energy Solutions B.V.
The Hague, The Netherlands

GES-S120/FNH

ELECTRICAL CHARACTERISTICS

STC	325	330	335	340	345
Maximum Power at STC (Pmax)	325W	330W	335W	340W	345W
Optimum Operating Voltage (Vmp)	34.5V	34.7V	34.9V	35.1V	35.3V
Optimum Operating Current (Imp)	9.43A	9.52A	9.60A	9.68A	9.78A
Open Circuit Voltage (Voc)	40.5V	40.7V	40.9V	41.1V	41.3V
Short Circuit Current (Isc)	10.04A	10.13A	10.21A	10.29A	10.37A
Module Efficiency	19.2%	19.5%	19.8%	20.1%	20.4%
Operating Module Temperature	-40°C to +85°C				
Maximum System Voltage	1500V DC (IEC)				
Maximum Series Fuse rating	20A				
Power Tolerance	0~+5W				

STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5; Measuring tolerance: ± 3%.

NMOT	325	330	335	340	345
Maximum Power at NMOT (Pmax)	244.9W	248.6W	252.1W	255.5W	259.3W
Optimum Operating Voltage (Vmp)	31.7V	31.9V	32.1V	32.3V	32.5V
Optimum Operating Current (Imp)	7.72A	7.79A	7.85A	7.92A	7.98A
Open Circuit Voltage (Voc)	37.9V	38.1V	38.3V	38.5V	38.7V
Short Circuit Current (Isc)	8.11A	8.18A	8.24A	8.31A	8.37A

NMOT: Irradiance 800 W/m², ambient temperature 20°C, AM=1.5, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.040%/°C

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline 158.75 mm
No. of Cells	120 (6 × 20)
Dimensions	1684 × 1002 × 35 mm
Weight	19.0 kgs
Front Glass	3.2 mm tempered glass with AR coating
Frame	Anodized Aluminium Alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , cable length 350 mm or customized length
Connectors	MC4 compatible

PACKING CONFIGURATION

Container	20' GP	40' HC
Pieces per pallet	31	31+3
Pallets per container	12	26
Pieces per container	372	884

