

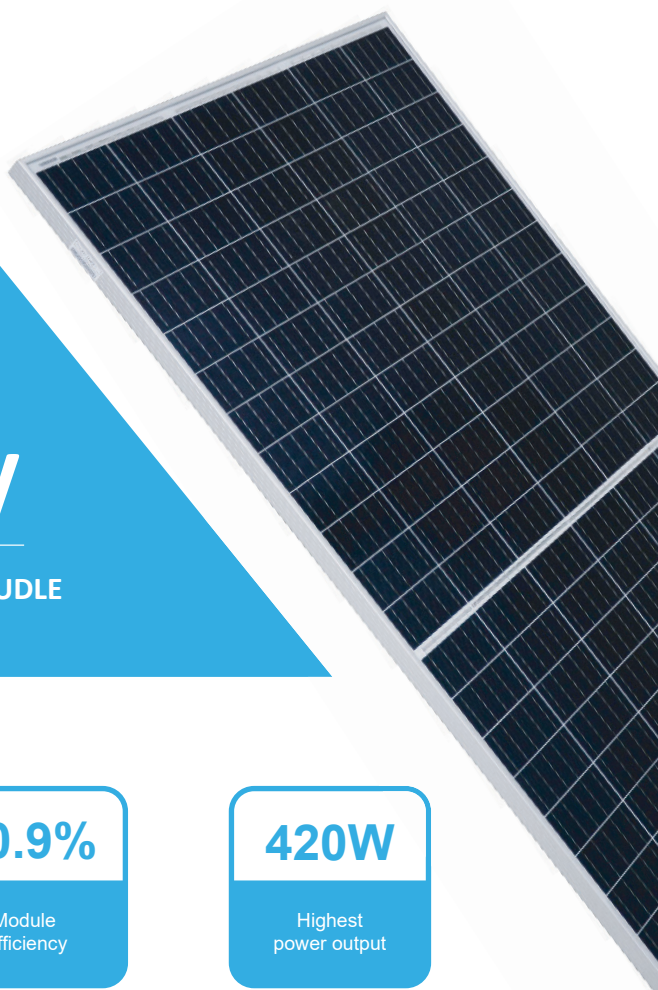


和光新能源
HEGATECH

HGT-S144/FNH

420-400W-HV

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



Product Advantages



High Efficiency

Module efficiency leading in industry, up to 20.9%



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



Low NMOT

As low as 43°C, improving the power generation efficiency



Half Cell, MBB Technology

Series-then-parallel cell connection design, more reliable soldering technology

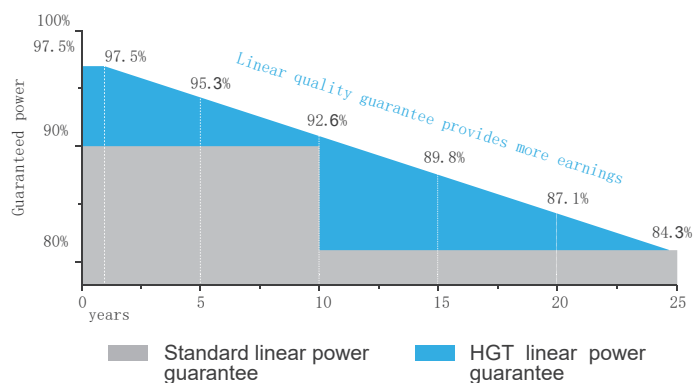
20.9%

Module efficiency

420W

Highest power output

Product Guarantee



-2.50%

First year power degradation

-0.55%

Annual degradation

12
Years

Materials and workmanship warranty

25
Years

Linear power warranty

Product Certification



HGT-S144/FNH-HV

Electrical Characteristics

STC	420	415	410	405	400
Maximum Power at STC (Pmax)	420 W	415 W	410 W	405 W	400 W
Optimum Operating Voltage (Vmp)	42.6 V	42.4 V	42.2 V	42.0 V	41.8 V
Optimum Operating Current (Imp)	9.86 A	9.79 A	9.72 A	9.65 A	9.57 A
Open Circuit Voltage (Voc)	49.8 V	49.6 V	49.4 V	49.2 V	49.0 V
Short Circuit Current (Isc)	10.45 A	10.38 A	10.31 A	10.24 A	10.17 A
Module Efficiency	20.9%	20.6%	20.4%	20.1%	19.9%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1500 V DC				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5W				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NM O T	420	415	410	405	400
Maximum Power at NMOT (Pmax)	314.3 W	311.2 W	308.1 W	304.6 W	300.8 W
Optimum Operating Voltage (Vmp)	39.1 V	39.0 V	38.8 V	38.7 V	38.5 V
Optimum Operating Current (Imp)	8.04 A	7.98 A	7.93 A	7.88 A	7.82 A
Open Circuit Voltage (Voc)	46.7 V	46.5 V	46.3 V	46.1 V	45.9 V
Short Circuit Current (Isc)	8.45 A	8.39 A	8.33 A	8.27 A	8.21 A

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

Temperature Characteristics

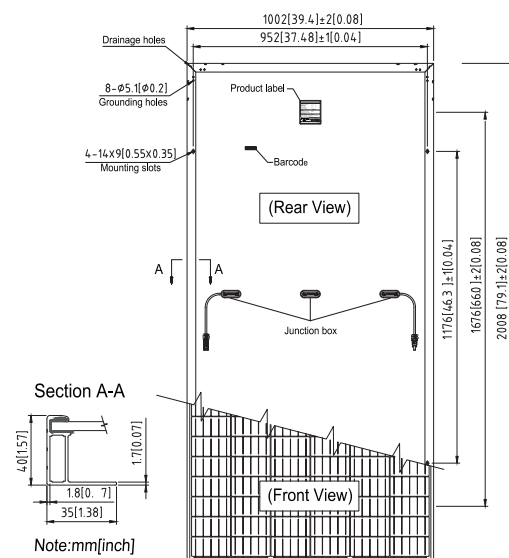
Nominal Module Operating Temperature(NM O T)	42±2°C
Temperature Coefficient of Pmax	-0.37 %/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline 158.75mm
No. of Cells	144 (6 × 24)
Dimensions	2008 × 1002 × 40mm
Weight	23 kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² Portrait: (-) 350 mm and (+) 160mm in length Landscape: (-) 1200mm and (+) 1200 mm in length or customized length
Connectors	FORSOL:SIKE6, Renhe:05-8, Renhe:05-9, Zerun:Z4S-abcde
Fire Sauty Rate	Class C

Packing Configuration

Container	20 ' GP	40 ' HC
Pieces per pallet	26	26+2
Pallets per container	10	22
Pieces per container	260	616



Current-Voltage & Power-Voltage Curve (410)

