



# SOLAR N PLUS

SP-N16B/132HG

# N-TYPE Bifacial 600-640W



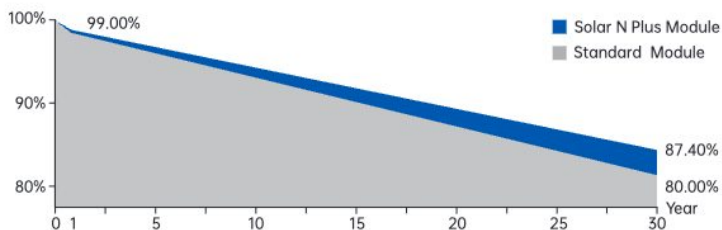
## WARRANTY



Guarantee on product material and workmanship



Linear power output warranty



## INSURANCE



中国平安  
PING AN

## CERTIFICATION



- ISO 9001: 2015/quality management system
- ISO 14001: 2015/environment management system
- ISO 45001: 2018/occupation health safety management system

# 600-640W

SP-N16B/132HG

## ELECTRICAL CHARACTERISTICS (STC)

|                             |   |       |       |       |       |       |       |       |       |       |
|-----------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pm)          | W | 600   | 605   | 610   | 615   | 620   | 625   | 630   | 635   | 640   |
| Power Tolerance             | W | 0~+5  |       |       |       |       |       |       |       |       |
| Maximum Power Voltage (Vm)  | V | 40.16 | 40.31 | 40.46 | 40.60 | 40.74 | 40.88 | 41.02 | 41.17 | 41.32 |
| Maximum Power Current (Im)  | A | 14.94 | 15.01 | 15.08 | 15.15 | 15.22 | 15.29 | 15.36 | 15.43 | 15.49 |
| Open Circuit Voltage (Voc)  | V | 48.28 | 48.48 | 48.68 | 48.88 | 49.08 | 49.28 | 49.48 | 49.68 | 49.88 |
| Short Circuit Current (Isc) | A | 15.84 | 15.90 | 15.96 | 16.02 | 16.08 | 16.14 | 16.2  | 16.26 | 16.32 |
| Module Efficiency (ηm)      | % | 22.2  | 22.4  | 22.6  | 22.8  | 23.0  | 23.1  | 23.3  | 23.5  | 23.7  |

STC:AM=1.5, irradiance=1000W/m², module temperature=25°C

## ELECTRICAL CHARACTERISTICS (NMOT)

|                             |   |       |       |       |       |       |       |       |       |       |
|-----------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pm)          | W | 453   | 457   | 461   | 465   | 469   | 473   | 477   | 481   | 485   |
| Maximum Power Voltage (Vm)  | V | 37.6  | 37.8  | 38.0  | 38.2  | 38.4  | 38.7  | 38.9  | 39.1  | 39.3  |
| Maximum Power Current (Im)  | A | 12.05 | 12.09 | 12.14 | 12.17 | 12.21 | 12.24 | 12.27 | 12.3  | 12.33 |
| Open Circuit Voltage (Voc)  | V | 45.8  | 46.0  | 46.2  | 46.4  | 46.6  | 46.8  | 47.0  | 47.2  | 47.4  |
| Short Circuit Current (Isc) | A | 12.69 | 12.72 | 12.75 | 12.78 | 12.81 | 12.84 | 12.87 | 12.90 | 12.93 |

NMOT: irradiance=800W/m², environment temperature=20°C, wind speed=1m/s

## REAR SIDE POWER GAIN

|     |            |        |        |        |        |        |        |        |        |        |
|-----|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5%  | Max Power  | 630    | 635    | 641    | 646    | 651    | 656    | 662    | 667    | 672    |
|     | Efficiency | 23.32% | 23.52% | 23.71% | 23.91% | 24.10% | 24.29% | 24.49% | 24.68% | 24.88% |
| 15% | Max Power  | 690    | 696    | 702    | 707    | 713    | 719    | 725    | 730    | 736    |
|     | Efficiency | 25.54% | 25.76% | 25.97% | 26.18% | 26.40% | 26.61% | 26.82% | 27.03% | 27.25% |
| 25% | Max Power  | 750    | 756    | 763    | 769    | 775    | 781    | 788    | 794    | 800    |
|     | Efficiency | 27.77% | 28.00% | 28.23% | 28.46% | 28.69% | 28.92% | 29.15% | 29.39% | 29.62% |

## MECHANICAL SPECIFICATIONS

|                            |                                                              |
|----------------------------|--------------------------------------------------------------|
| External Dimension (L×W×H) | 2382×1134×30mm                                               |
| Weight                     | 33.8kg                                                       |
| Number of Cells            | 132 (6×22)                                                   |
| Front Glass                | 2.0mm AR-coating heat-strengthened glass                     |
| Rear Glass                 | 2.0mm heat-strengthened glass                                |
| Frame                      | Glass fiber reinforced polyured composite frame, black color |
| Junction Box               | IP68                                                         |
| Output Cables              | 4.0mm², 300mm or customized length                           |
| Connector                  | MC4 Compatible                                               |

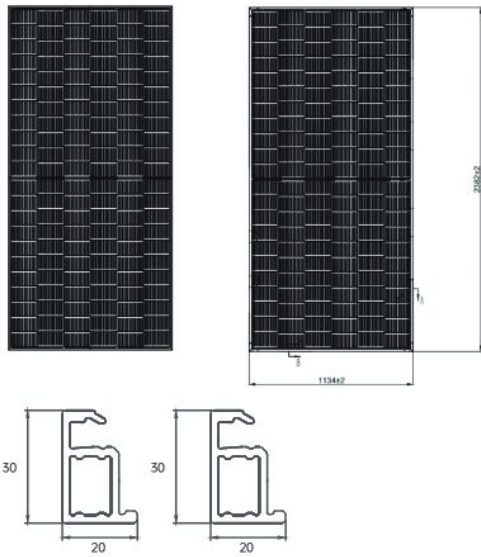
## APPLICATION CONDITIONS

|                            |                             |
|----------------------------|-----------------------------|
| Maximum System Voltage     | DC1500V (IEC)               |
| Maximum Series Fuse Rating | 30A                         |
| Operating Temperature      | -40°C ~ +85°C               |
| Mechanical Load            | 5400Pa/2400Pa               |
| Hail Test                  | 25mm diameter hail at 23m/s |
| Bifaciality                | 80±5%                       |
| Application Rating         | Class A                     |

## TEMP CHARACTERISTICS

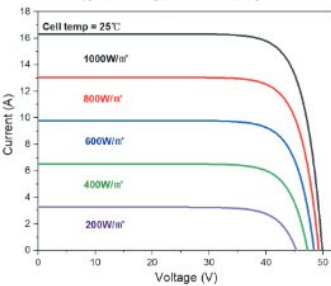
|                                      |            |
|--------------------------------------|------------|
| Nominal Module Operating Temperature | 42±2°C     |
| Temperature Coefficient of Pmax      | -0.29%/°C  |
| Temperature Coefficient of Voc       | -0.25%/°C  |
| Temperature Coefficient of ISC       | +0.045%/°C |

## TECHNICAL DRAWING

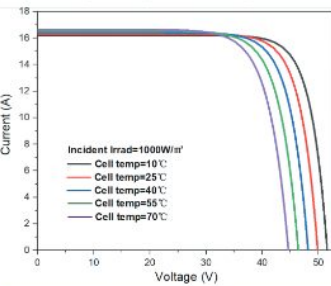


## I-V CURVE

I-V characteristics at different irradiance  
(SP-N16B/132HG640W)



I-V characteristics at different temperatures  
(SP-N16B/132HG640W)



## PACKING CONFIGURATION

|                      |                  |
|----------------------|------------------|
| Container            | 40'HC            |
| Pieces per Pallet    | 37 pcs           |
| Packaging box Size   | 2439×1145×1260mm |
| Pieces per Container | 740 pcs          |



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