



## Hitouch 6N

### HN21RN-54HT

## 495-520W

### BIFACIAL

Full Black Module

### 23.4%

Maximum Efficiency



#### Long-Term Reliability

Module certified to withstand 5400 Pa positive static load and 2400 Pa negative static load.

Excellent anti-PID performance to guarantee a better sustainability in harsh environment.



#### Lower Hot Spot and Crack Risk

Reduce hot-spot risk with optimized electrical design and lower operating current.

Reduce crack risk by optimization of solar cell design.



#### Higher Power Output

Higher module conversion efficiency benefit from bigger wafer and half-cell structure.

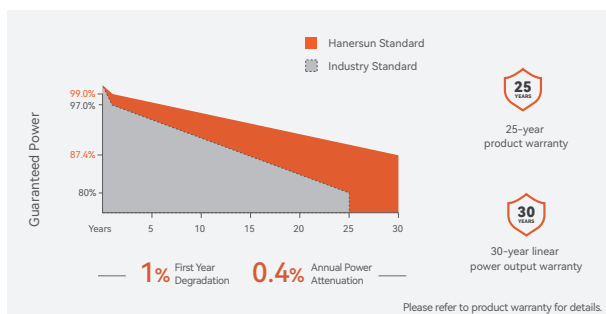
Better light trapping and current collection to improve module power output and reliability.



#### Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

### Power Warranty



### Certificates



Warranty partner

**Munich RE**

15Y Product / 30Y Linear Power Warranty under Munich Re insurance.

### About Hanersun

Hanersun is a world-leading clean energy company, focusing on R&D, manufacturing and distribution of solar module and energy storage system, as well as comprehensive clean energy solutions. Committed to high-efficiency technologies, the company is one of the first to launch PV modules of 600W+ and 700W+ in the industry.

## Electrical Characteristics (STC)

| Module Type                 | HN21RN-54HT495W | HN21RN-54HT500W | HN21RN-54HT505W | HN21RN-54HT510W | HN21RN-54HT515W | HN21RN-54HT520W |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum Power (Pmax)        | 495             | 500             | 505             | 510             | 515             | 520             |
| Maximum Power Voltage (Vmp) | 33.06           | 33.24           | 33.42           | 33.60           | 33.78           | 33.96           |
| Maximum Power Current (Imp) | 14.98           | 15.05           | 15.12           | 15.18           | 15.25           | 15.32           |
| Open-circuit Voltage (Voc)  | 39.70           | 39.90           | 40.10           | 40.30           | 40.50           | 40.70           |
| Short-circuit Current (Isc) | 15.88           | 15.95           | 16.02           | 16.10           | 16.17           | 16.25           |
| Module Efficiency(%)        | 22.3%           | 22.5%           | 22.7%           | 22.9%           | 23.2%           | 23.4%           |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

Power Tolerance: 0~+3%

## Electrical Characteristics (BNPI)

| Module Type                 | 495W  | 500W  | 505W  | 510W  | 515W  | 520W  |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax)        | 549   | 554   | 560   | 566   | 571   | 577   |
| Maximum Power Voltage (Vmp) | 33.06 | 33.24 | 33.42 | 33.60 | 33.78 | 33.96 |
| Maximum Power Current (Imp) | 16.61 | 16.67 | 16.76 | 16.85 | 16.91 | 17.00 |
| Open-circuit Voltage (Voc)  | 39.70 | 39.90 | 40.10 | 40.30 | 40.50 | 40.70 |
| Short-circuit Current (Isc) | 17.60 | 17.68 | 17.76 | 17.84 | 17.92 | 18.01 |

BNPI: Irradiance: Front 1000W/m<sup>2</sup>, Rear 135W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

## Mechanical Parameters

|                   |                                               |              |                                                    |
|-------------------|-----------------------------------------------|--------------|----------------------------------------------------|
| Solar Cells       | N-TYPE Monocrystalline(210R)                  | No. of Cells | 108 [2 x (9 x 6) ]                                 |
| Module Dimensions | 1961*1134*30mm                                | Weight       | 26.4kg                                             |
| Frame             | Anodized Aluminium Alloy                      | J-Box        | IP68                                               |
| Front Glass       | 2.0 mm,<br>AR Coating Heat Strengthened Glass | Connector    | Z4S-abcd/MC4-EVO 2A/Others                         |
| Back Glass        | 2.0 mm,<br>Heat Strengthened Glass            | Cables       | 4.0mm <sup>2</sup> , 300/300mm (can be customized) |

## Operating Parameters

|                            |                |
|----------------------------|----------------|
| Operational Temperature    | -40°C~+70°C    |
| Maximum System Voltage     | 1500V DC (IEC) |
| Maximum Series Fuse Rating | 35A            |
| Bifacial                   | 80±5%          |
| Fire Class Rating          | Class C        |

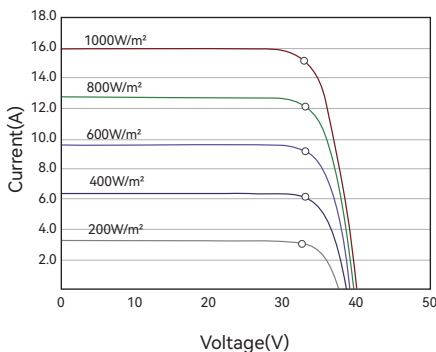
## Temperature Ratings

|                                 |            |
|---------------------------------|------------|
| Temperature Coefficient of Pmax | -0.28%/°C  |
| Temperature Coefficient of Voc  | -0.23%/°C  |
| Temperature Coefficient of Isc  | +0.045%/°C |

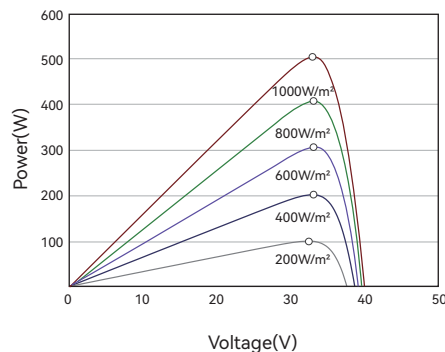
## Packaging

|                    |                     |
|--------------------|---------------------|
| Pcs per Pallet: 37 | Pcs per 40' HC: 888 |
|--------------------|---------------------|

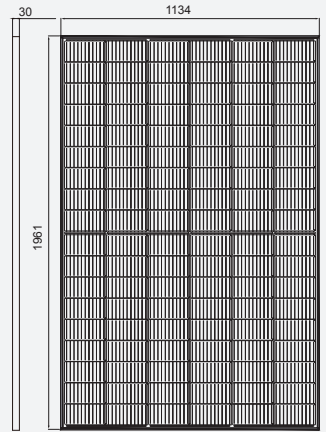
## I-V Curves of PV Module (505W)



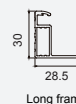
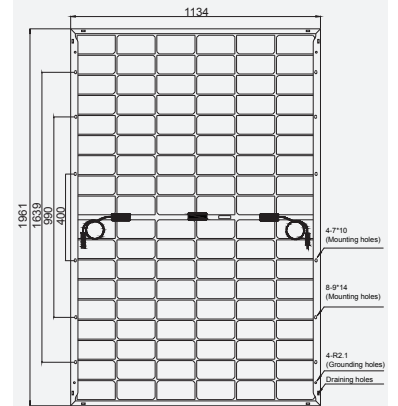
## P-V Curves of PV Module (505W)



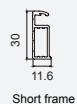
## Dimensions (Unit: mm)



Front View



Long frame



Short frame

Back View