



## Hitouch 5N

HN18N-54HB

# 415-440W

**MONOFACIAL**

Full Black Module

**22.5%**

Maximum Efficiency



### Long-Term Reliability

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal).

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



### Higher Power Output

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

MBB technology enhances current collection with lower series resistance.



### Lower Hot Spot and Crack Risk

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

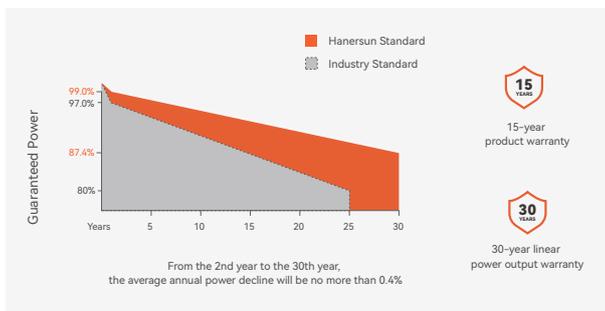
Reduce crack risk by MBB solar cell design.



### Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

## Power Warranty



## Certificates



Warranty partner



## 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                 | HN18N-54HB415W | HN18N-54HB420W | HN18N-54HB425W | HN18N-54HB430W | HN18N-54HB435W | HN18N-54HB440W |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Maximum Power (Pmax)        | 415            | 420            | 425            | 430            | 435            | 440            |
| Maximum Power Voltage (Vmp) | 31.70          | 31.90          | 32.10          | 32.30          | 32.50          | 32.70          |
| Maximum Power Current (Imp) | 13.10          | 13.17          | 13.24          | 13.32          | 13.39          | 13.46          |
| Open-circuit Voltage (Voc)  | 37.70          | 37.90          | 38.10          | 38.30          | 38.50          | 38.70          |
| Short-circuit Current (Isc) | 13.91          | 13.98          | 14.05          | 14.12          | 14.19          | 14.26          |
| Module Efficiency(%)        | 21.3%          | 21.5%          | 21.8%          | 22.0%          | 22.3%          | 22.5%          |

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

Power Tolerance: 0~+3%

## Mechanical Parameters

|                   |   |
|-------------------|---|
| Solar Cells       | N-TYPE Monocrystalline(182mm)   |
| No. of Cells      | 108 [2 x (9 x 6)]   |
| Module Dimensions | 1722*1134*30mm  |
| Weight            | 20.2kg  |
| Glass             | 3.2mm, Anti-reflection Coating, High Transmission, Low Iron, Tempered Glass |
| Backsheet         | Black   |
| Frame             | Anodized Aluminium Alloy  |
| J-Box             | IP68  |
| Output Cable      | 4.0mm <sup>2</sup>  |
| Cable Length      | Length Portrait:300/300mm (can be customized)                               |
| Connector         | MC4-EVO 2A/Z4S-abcd/Others  |

## Operating Parameters

|                            |                |
|----------------------------|----------------|
| Operational Temperature    | -40°C~+85°C    |
| Maximum System Voltage     | 1500V DC (IEC) |
| Maximum Series Fuse Rating | 25A            |
| Bifaciality                | /              |
| 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 |

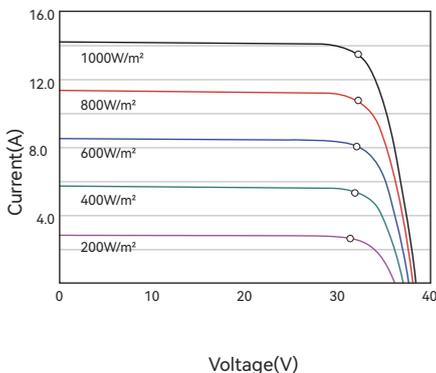
(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

## Packaging

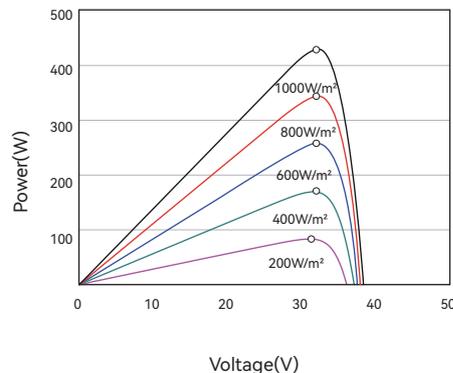
Pcs per Pallet: 37

Pcs per 40' HC: 962

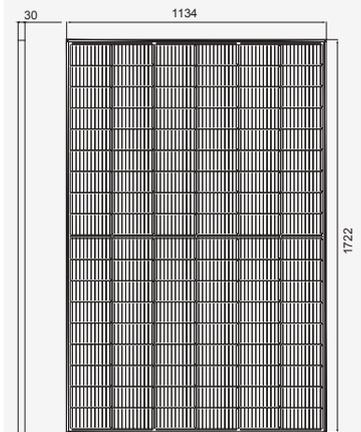
## I-V Curves of PV Module (430W)



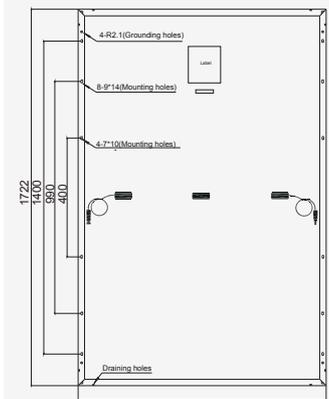
## P-V Curves of PV Module (430W)



## Dimensions (Unit: mm)



Front View



Back View