HANERSUN



TOPCon

Hitouch 5N HN18N-54H

420-440W

TOPCon High Efficiency Module

22.53%

Maximum Efficiency

12 YEARS Product Warranty



Higher Power Output

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

MBB technology enhances current collection with lower series resistance.

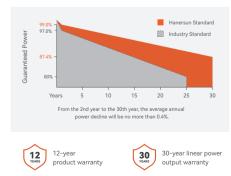


Long-Term Reliability

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.

Power Warranty





Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

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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.

Comprehensive Certificates

IEC 61215-1:2016, IEC 61215-1-1:2016 IEC 61215-2:2016, IEC 61730-1:2016 IEC 61730-2:2016



About Hanersun

Hanersun is a world-leading energy technology company, with a business scope from the R&D and intelligent manufacturing of solar modules, energy storage products, to comprehensive energy solutions.

* This version datasheet applies to Suntastic.Solar Handels GmbH only.

BloombergNEF Tier 1 PV Module Manufacturer

Electrical Characteristics

| Module Type | HN18N- | 54H420W | HN18N-54H425W HN | | HN18N- | HN18N-54H430W | | HN18N-54H435W | | HN18N-54H440W | |
|-----------------------------|---------------|---------|------------------|--------|--------|---------------|-------|---------------|-------|---------------|--|
| Testing Condition | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | |
| Maximum Power (Pmax) | 420 | 318 | 425 | 322 | 430 | 326 | 435 | 330 | 440 | 334 | |
| Maximum Power Voltage (Vmp) | 31.90 | 30.00 | 32.10 | 30.20 | 32.30 | 30.30 | 32.50 | 30.50 | 32.70 | 30.70 | |
| Maximum Power Current (Imp) | 13.17 | 10.62 | 13.24 | 10.67 | 13.32 | 10.74 | 13.39 | 10.80 | 13.46 | 10.88 | |
| Open-circuit Voltage (Voc) | 37.90 | 36.20 | 38.10 | 36.40 | 38.30 | 36.60 | 38.50 | 36.80 | 38.70 | 37.00 | |
| Short-circuit Current (Isc) | 13.98 | 11.27 | 14.05 | 11.33 | 14.12 | 11.38 | 14.19 | 11.44 | 14.26 | 11.50 | |
| Module Efficiency(%) | 21.50% 21.76% | | 76% | 22.02% | | 22.27% | | 22.53% | | | |

Operating Parameters Operational Temperature

Maximum System Voltage

Bifacility

500

Maximum Series Fuse Rating

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: 0 ~ +5W

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Mechanical Parameters

| Solar Cells | Monocrystalline (182mm) |
|-----------------------|---|
| No. of Cells | 108 [2 x (9 x 6)] |
| Module Dimensions | 1722*1134*30mm |
| Weight | 21.5kg |
| Glass | 3.2mm, High Transmission, AR Coated Heat Strengthened Glass |
| Encapsulant Material | EVA/POE |
| Backsheet | White |
| Frame | Anodized Aluminium Alloy |
| J-Box | IP68 |
| Output Cable | 4.0mm ² |
| (Including Connector) | Length Portrait:1200/1200mm |
| Connector | MC4 Original |
| | |

Temperature Ratings

| NMOT (Nominal operating cell temperature) | 42°C(±2°C) | | | | |
|---|------------|--|--|--|--|
| Temperature Coefficient of Pmax | -0.310%/°C | | | | |
| Temperature Coefficient of Voc | -0.260%/°C | | | | |
| Temperature Coefficient of Isc | +0.046%/°C | | | | |
| (Do not connect Fuse in Combiner Box with two or more strings | | | | | |

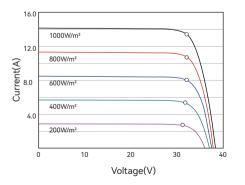
in parallel connection)

Packaging

Pcs per Pallet: 36

Pcs per 40' HC: 936

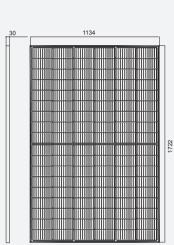
I-V Curves of PV Module (430W)



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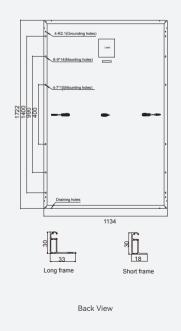
Website: www.hanersun.com

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Dimensions (Unit: mm)

Front View



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P-V Curves of PV Module (430W)

-40°C~+85°C 1500V DC (IEC)

30A

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