



Hitouch 510

HN18-54HB

395-415W

TOPCon

High Efficiency Module

21.25%

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.



Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output

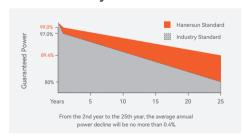


Lower Hot Spot and Crack Risk

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

Reduce crack risk by MBB solar cell design.

Power Warranty



12-year product wa



25-year linear power output warranty

Insurance





Certificates

















About Hanersun

Hanersun is a world leading solar module manufacturer and comprehensive energy solution provider. We provide customers with cutting edge solar modules, and services for the entire project life cycle.



Electrical Characteristics

| Module Type | HN18-54HB395W | | HN18- | HN18-54HB400W | | HN18-54HB405W | | HN18-54HB410W | | HN18-54HB415W | |
|-----------------------------|---------------|-------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|--|
| Testing Condition | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | |
| Maximum Power (Pmax) | 395 | 299 | 400 | 303 | 405 | 307 | 410 | 311 | 415 | 315 | |
| Maximum Power Voltage (Vmp) | 30.90 | 29.00 | 31.10 | 29.20 | 31.30 | 29.40 | 31.50 | 29.60 | 31.70 | 29.80 | |
| Maximum Power Current (Imp) | 12.80 | 10.32 | 12.87 | 10.38 | 12.95 | 10.44 | 13.02 | 10.50 | 13.10 | 10.56 | |
| Open-circuit Voltage (Voc) | 36.90 | 35.30 | 37.10 | 35.50 | 37.30 | 35.70 | 37.50 | 35.80 | 37.70 | 36.00 | |
| Short-circuit Current (Isc) | 13.60 | 10.95 | 13.67 | 11.02 | 13.75 | 11.09 | 13.82 | 11.14 | 13.91 | 11.22 | |
| Module Efficiency(%) | 20.22% | | 2 | 20.48% | | 20.74% | | 20.99% | | 21.25% | |

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

NMOT: Irradiance at $800W/m^2$, Ambient Temperature $20^{\circ}C$, 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 | Black | | |
| Frame | Anodized Aluminium Alloy | | |
| J-Box | IP68 | | |
| Output Cable | 4.0mm² | | |
| (Including Connector) | Length Portrait:300/300mm (can be customized) | | |
| Connector | MC4 Compatible | | |

Temperature Ratings

| NMOT (Nominal operating cell temperature) | 42°C(±2°C) | | |
|---|------------|--|--|
| Temperature Coefficient of Pmax | -0.310%/℃ | | |
| Temperature Coefficient of Voc | -0.260%/°C | | |
| Temperature Coefficient of Isc | +0.040%/°C | | |

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

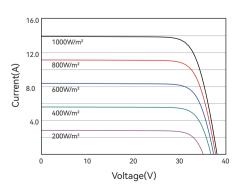
Packaging

Pcs per Pallet: 36
Pcs per 40' HC: 936

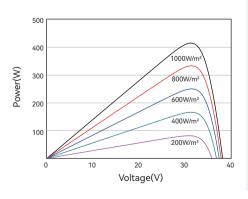
Operating Parameters

| Operational Temperature | -40°C~+85°C | | | |
|----------------------------|----------------|--|--|--|
| Maximum System Voltage | 1500V DC (IEC) | | | |
| Maximum Series Fuse Rating | 30A | | | |
| Bifacility | / | | | |

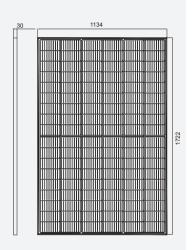
I-V Curves of PV Module (415W)



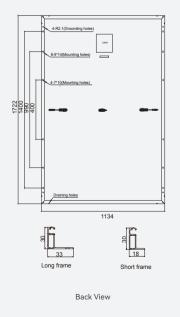
P-V Curves of PV Module (415W)



Dimensions (Unit: mm)



Front View



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^{*}Measuring tolerance: 0 ~ +5W