

Hitouch 5N

HN18-60H

460-480W

TOPCon

High Efficiency Module

22.16%

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.



Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output



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.

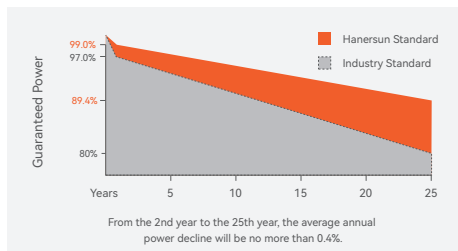


Lower Hot Spot and Crack Risk

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 warranty



25-year linear power output warranty

Insurance



Munich RE



太平洋保险 CPIC

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 | HN18-60H460W | | HN18-60H465W | | HN18-60H470W | | HN18-60H475W | | HN18-60H480W | |
|-----------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT |
| Maximum Power (Pmax) | 460 | 349 | 465 | 353 | 470 | 357 | 475 | 363 | 480 | 365 |
| Maximum Power Voltage (Vmp) | 35.10 | 32.76 | 35.30 | 32.96 | 35.50 | 33.15 | 35.70 | 33.35 | 35.90 | 33.56 |
| Maximum Power Current (Imp) | 13.16 | 10.66 | 13.22 | 10.71 | 13.28 | 10.76 | 13.34 | 10.81 | 13.40 | 10.88 |
| Open-circuit Voltage (Voc) | 42.00 | 39.45 | 42.20 | 39.65 | 42.40 | 39.85 | 42.60 | 40.05 | 42.80 | 40.25 |
| Short-circuit Current (Isc) | 13.96 | 11.31 | 14.02 | 11.35 | 14.08 | 11.40 | 14.16 | 11.46 | 14.21 | 11.51 |
| Module Efficiency(%) | 21.24% | | 21.47% | | 21.70% | | 21.93% | | 22.16% | |

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 | 120[2 x (10x 6)] |
| Module Dimensions | 1910*1134*30mm |
| Weight | 24.0kg |
| 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: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%/°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)

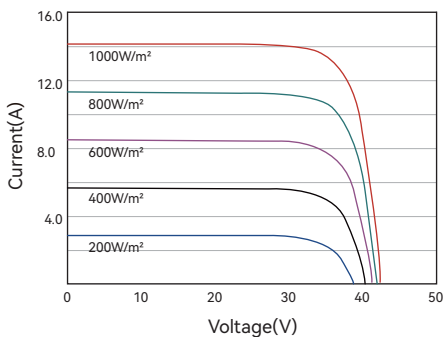
Packaging

Pcs per Pallet: 36
Pcs per 40' HC: 864

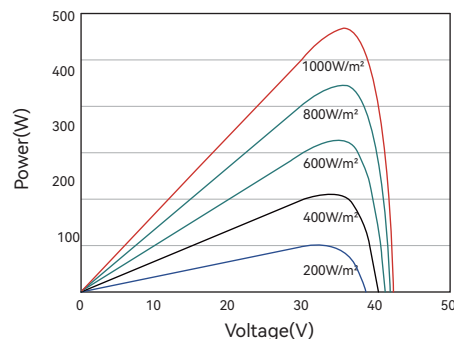
Operating Parameters

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

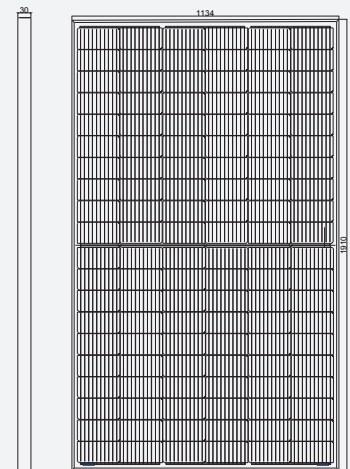
I-V Curves of PV Module (470W)



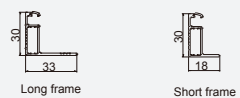
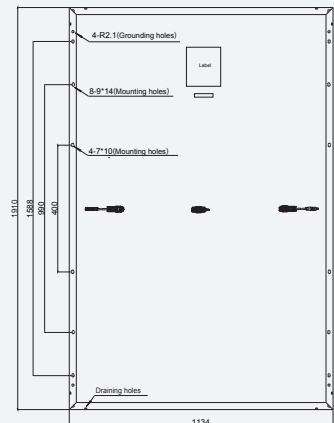
P-V Curves of PV Module (470W)



Dimensions (Unit: mm)



Front View



Back View