



Product Service

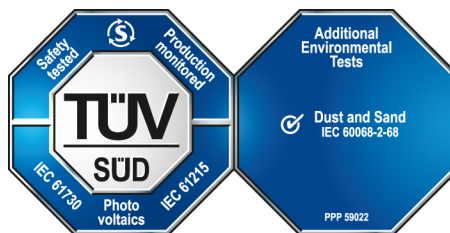
CERTIFICATE

No. Z2 119897 0013 Rev. 00

Holder of Certificate: **Hanersun Energy Co., Ltd.**

10F, B4 Block, No.19 Suyuan Avenue
Jiangning District
211100 Nanjing
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product:

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
Mono-Crystalline Silicon Photovoltaic module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062424521-00

Valid until: 2029-12-05

Date, 2024-12-09

(Zhulin Zhang)



CERTIFICATE

No. Z2 119897 0013 Rev. 00

Model(s):

HN21N-66HxxxW & HN21N-66HBxxxW, xxx=680-715 in steps of 5
 HN21N-60HxxxW & HN21N-60HBxxxW, xxx=615-650 in steps of 5
 HN21RN-66HxxxW & HN21RN-66HBxxxW, xxx=600-630 in steps of 5
 HN21RN-48HxxxW & HN21RN-48HBxxxW, xxx=430-455 in steps of 5
 HN19RN-72HxxxW & HN19RN-72HBxxxW, xxx=600-630 in steps of 5
 HN19RN-60HxxxW & HN19RN-60HBxxxW, xxx=500-525 in steps of 5
 HN18N-78HxxxW & HN18N-78HBxxxW, xxx=615-650 in steps of 5
 HN18N-72HxxxW & HN18N-72HBxxxW, xxx=570-600 in steps of 5
 HN18N-66HxxxW & HN18N-66HBxxxW, xxx=520-550 in steps of 5
 HN18N-60HxxxW & HN18N-60HBxxxW, xxx=475-500 in steps of 5
 HN18N-54HxxxW & HN18N-54HBxxxW, xxx=425-450 in steps of 5
 HN18N-32HxxxW & HN18N-32HBxxxW, xxx=250-265 in steps of 5
 HN18N-16HxxxW & HN18N-16HBxxxW, xxx=125-130 in steps of 5
 HN18RN-72HxxxW & HN18RN-72HBxxxW, xxx=580-615 in steps of 5
 HN18RN-54HxxxW & HN18RN-54HBxxxW, xxx=430-460 in steps of 5
 xxx is standing for rated output power at STC

Parameters:

Construction: Framed, with Junction box,
Cable and Connectors.
 Safety Class: Class II
 Maximum System Voltage: 1500 V DC
 Fire Safety Class: Class C
 Dust and sand test method: IEC 60068-2-68,LC1
 Dust/sand type: 95% SiO₂
 Dust /sand concentration: 5g/m³
 Testing air velocity: 20m/s
 Test duration : 4h/each side.

Tested according to:

PPP 59022B:2021
 IEC 61215-1:2021
 IEC 61215-1-1:2021
 IEC 61215-2:2021
 IEC 61730-1:2023
 IEC 61730-2:2023