

N⁺SERIES

SUN182THCD490&495&500-60

490~500W

MAXIMUM POWER OUTPUT

22.65%~23.11%

MAX MODULE
EFFICIENCY

0~+5W

POWER
TOLERANCE

≤1%

FIRST YEAR

POWER DEGRADATION

≤0.4%

YEAR 2~30

POWER DEGRADATION

BIFACIAL MODULE

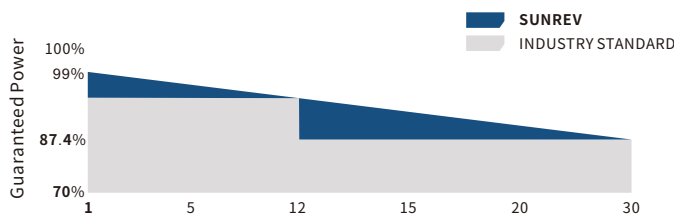
N-Type

IEC 61215(2021), IEC 61730(2023)

ISO 9001:2015: Quality management system

ISO 14001:2015: Environment System

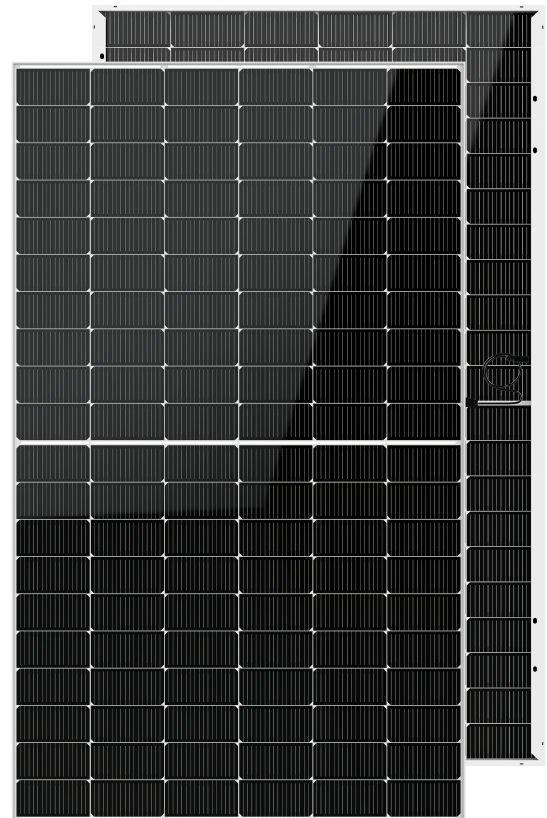
ISO 45001:2018: Occupational health management systems



12-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output

0.40% Annual Degradation Over 30 years



PRODUCT FEATURES



SMBB Technology Half Cut N-Type Cell

Better light trapping and current collection to improve module power output and reliability.



Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Higher reliability

The N-type has a single-watt power generation gain of over 3% compared to PERC modules, reduces power temperature loss, and exhibits excellent high-temperature performance. Low electricity cost



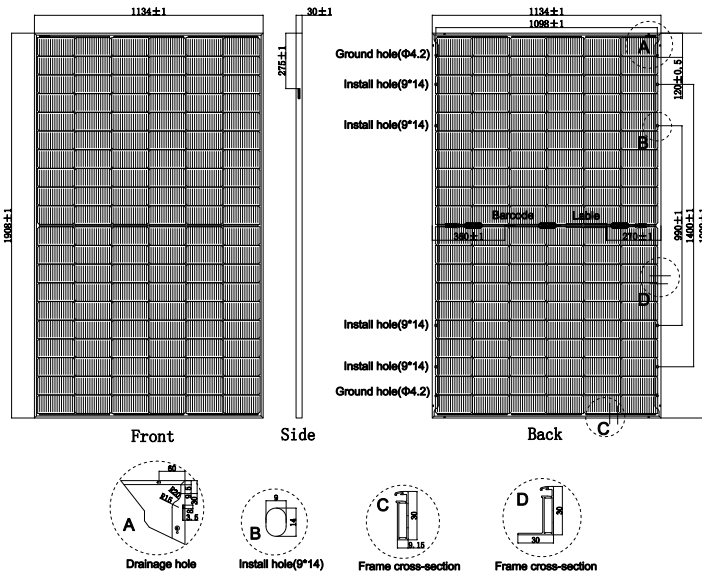
Enhanced Mechanical Load

Test load 5400Pa(downward) and 2400 Pa(upward).



Made in China

Drawing Information



Connector Model

- 1: Zerun Co., Ltd. Z4S-abcd
- 2: Zhejiang Minghe New EnergyTechnology Co., Ltd. PV-MH5
- 3: Zhejiang Chint XinHui PV Co., Ltd. PV-HCC40

Packaging Configuration

Per Pallet	36Pcs	
Container	20GP	40HQ
Pcs/Container	216	864

ELECTRICAL PARAMETERS

Module Type	SUN182THCD490-60			SUN182THCD495-60			SUN182THCD500-60		
	STC	BNPI	aBSI	STC	BNPI	aBSI	STC	BNPI	aBSI
Maximun Power(Pmax/W)	490	543		495	548		500	554	
Maximun Power Voltage(Vmp/V)	35.72	35.72		35.87	35.87		36.03	36.03	
Maximun Power Current(Imp/A)	13.73	15.21		13.80	15.28		13.88	15.38	
Open-circuit Voltage(Voc/V)	43.13	43.13		43.28	43.28		43.43	43.43	
Shot-circuit Current(Isc/A)	14.53	16.10	18.02	14.61	16.19	18.12	14.69	16.28	18.22
Module Efficiency(%)	22.65			22.88			23.11		
Module [T ₉₅] _{max}				70°C					
Maximun system voltage				1500VDC					
Maximun series fuse rating				30A					
Tolerance of Pmax/Voc/Isc				±3%					
Temperature coefficients of Pmax				-0.290%/°C					
Temperature coefficients of Voc				-0.250%/°C					
Temperature coefficients of Isc				0.040%/°C					
Bifaciality Coefficient				φVoc=100±5% φIsc=80±5% φPmax=80±5%					

***STC:** ☀ Irradiance 1000W/m² 🌡 Cell temperatura 25°C ☁ AM=1.5

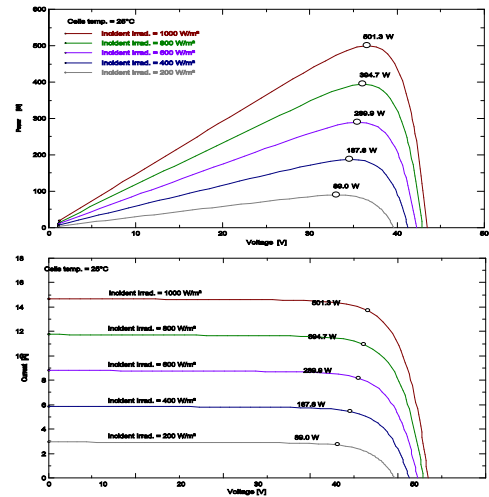
***BNPI:** ☀ Irradiance front 1000W/m² rear 135W/m² 🌡 Cell temperatura 25°C ☁ AM=1.5

***aBSI:** ☀ Irradiance front 1000W/m², rear 300W/m² 🌡 Cell temperatura 25°C ☁ AM=1.5

Manufacturer: Sunrev(Yangzhou) Photovoltaic Technology Co., Ltd.

Address: No.118, Jingang Road, Yangzhou Economic and Technological Development Zone 225100 Yangzhou City, Jiangsu Province PEOPLE, S REPUBLIC OF CHINA

I-V Curve(500W)



Mechanical Parameters

Cell Type	N type Mono-crystalline
No. of cells	120(6*20)
Dimensions	1908*1134*30mm
Weight	28.0kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy Frame
Junction Box	IP68 Rated / 3 Diodes
Output Cables	4.0mm ² /+300mm-300mm, or Customized length
Fire Safety Class	Class C according to UL790



<https://www.sunrev.com.au/>