#### COMMISSIE RUIMTELIJKE **KWALITEIT & ERFGOED GOOISE MEREN**

d.d.: 11-02-2023 Positief advies

# HLDD144 Series



Behoort bij besluit van B&W No: Z2023-00001164 d.d. 16-05-2024

Namens hen,

Het hoofd van de afdeling Vergunning, Toezicht en Handhaving

gemeente

gooisemeren



# 3 HALF-CELL Bifacial Light-Weight Double Glass Monocrystalline PERC PV Module

# 525W | 530W | 535W | 540W | 545W | 550W



### **Excellent cells efficiency**

MBB technology decreases the distance between busbar and finger grid line which is benefit to power increase.



#### **Better Weak Illumination Response**

More power output in weak light condition, such as haze, cloudy, and early morning.



#### **Anti PID**

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



#### **Adapt To Harsh Outdoor Environment**

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



#### TIER 1

Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing.



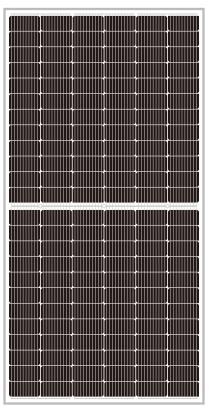
### **Excellent Quality Managerment System**

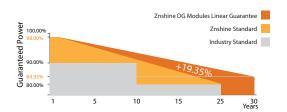
Warranted reliability and stringent quality assurances well beyond certified requirements.



## Bifacial Technology

Up to 25% additional power gain from back side depending on albedo.







12 years product guarantee 30 years output guarantee



0.45% annual degradation over 30 years











IEC61215/IEC61730/IEC61701/IEC62716/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO45001: Occupational Health and Safety Management System



#### **ELECTRICAL CHARACTERISTICS | STC\*** Nominal Power Watt Pmax(W)\* 525 530 535 545 550 540 Power Output Tolerance Pmax(%) 0~+3 0~+3 0~+3 0~+3 0~+3 0~+3 Maximum Power Voltage Vmp(V) 40.90 41.10 41.30 41.50 41.70 41.90 Maximum Power Current Imp(A) 12.85 12.91 12.96 13.02 13.07 13.13 Open Circuit Voltage Voc(V) 49.20 49.60 50.00 50.20 49.40 49.80 Short Circuit Current Isc(A) 13.59 13.71 13.83 13.89 13.65 13.77 Module Efficiency (%) 20.26 20.45 20.65 20.84 21.03 21.23 \*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, AM 1.5 \*Measuring tolerance: ±3%

ELECTRICAL CHARACTERISTICS   NMOT*						
Maximum Power Pmax(Wp)	392.70	396.40	399.90	403.60	406.80	410.80
Maximum Power Voltage Vmpp(V)	38.00	38.20	38.40	38.50	38.80	38.90
Maximum Power Current Impp(A)	10.33	10.38	10.42	10.47	10.49	10.56
Open Circuit Voltage Voc(V)	46.00	46.20	46.30	46.50	46.70	46.90
Short Circuit Current Isc(A)	10.98	11.02	11.07	11.12	11.17	11.22
*NMOT(Nominal module operating temperature):Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s						

ELECTRICAL CHARACT	<b>ERISTICS</b>	WITH 25	% REAR	SIDE PO	WER GAII	N
Front power Pmax/W	525	530	535	540	545	550
Total power Pmax/W	656	663	669	675	681	688
Vmp/V(Total)	41.00	41.20	41.40	41.60	41.80	42.00
Imp/A(Total)	16.01	16.08	16.15	16.23	16.30	16.37
Voc/V(Total)	49.30	49.50	49.70	49.90	50.10	50.30
Isc/A(Total)	16.95	17.02	17.10	17.17	17.25	17.32

# **MECHANICAL DATA**

Solar cells	MONO PERC
Cells orientation	144 (6×24)
Module dimension	2285×1134×35 mm(With Frame)
Weight	34 kg
Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Junction box	IP 68, 3 diodes
Cables	4 mm² ,350 mm
Connectors	MC4-compatible

Mono DEDC

TEMPERATURE RATING	iS	WORKING CONDITIONS		
NMOT	44°C ±2°C	Maximum system voltage	1500 V DC	
Temperature coefficient of Pmax	-0.35%/℃	Operating temperature	-40°C~+85°C	
Temperature coefficient of Voc	-0.29%/℃	Maximum series fuse	30 A	
Temperature coefficient of Isc	0.05%/℃	Maximum load(snow/wind)	5400 Pa / 2400 Pa	
Refer.Bifacial Factor	70±5%			

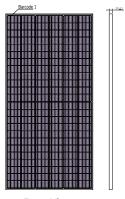
Do not connect Fuse in Combiner Box with two or more strings in parallel connection

#### PACKAGING CONFIGURATION

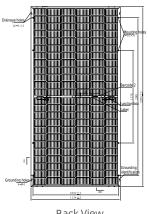
Piece/Box	31
Piece/Container <sub>(40'HQ)</sub>	620
Piece/Container(with additional small package)	/

\*Please be kindly advised that PV modules should be handled And installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

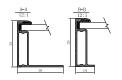
#### **DIMENSIONS(MM)**



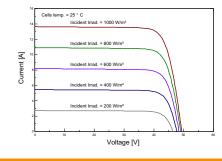
Front View



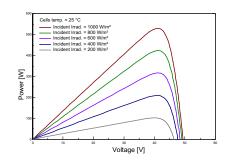
**Back View** 



#### **I-V CURVES OF PV MODULE(530W)**



#### P-V CURVES OF PV MODULE(530W)



<sup>\*</sup>Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types