

# HD SOLAR

PERC Mono Half-cell 182 144cells Bifacial double Glass module

## HDM-DG 525-550WP SOLAR MODULE

### Reliable Quality

- **10BB half-cut technology new circuit design** lower internal current lower RS loss
- **Industry Leading high yield** Bifacial PERC cell technology,5%-25% more yield depends on different conditions
- **Excellent Anti-PID performance** 2 times of industry standard Anti-PID test by TUV SUD
- **Wider application** No water-permeability and high wear-resistance,can be widely used in high-humid,windy and dusty area adaptable to harsh environment passed rigorous salt mist and ammonia tests

### MECHANICAL PARAMETERS

Cell(mm)	Mono182×182mm 10BB
Cell Arrangement	144(6*24)
Weight(kg)	32KG(70.5lbs)
Dimensions(L×W×H)(mm)	2300*1134*35mm( 90.55*44.68*1.38inches)
CableLength( Portrait)	300mm(11.81inches) or Customized
Cable Length(Landscape)	1200mm(47.24inches)or Customized
Cabel Cross Section Size	4mm <sup>2</sup> (0.006inches <sup>2</sup> )
Front Glass	2.0mm(0.08inches)AR Coated Strengthened Glass
Back Glass	2.0mm(0.08inches)Heat Strengthened Glass(White Grid Glass)
No.of Bypass Diodes	3/6
Junction Box	IP68
Frame	Anodized Aluminium alloy
Packing	31pcs/carton 620pcs/40HQ

### WORKING CONDITIONS

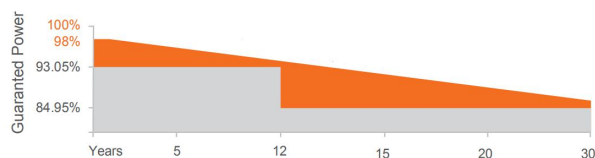
Maximum system voltage	1500V/DC(IEC)
Operating temperature	-40℃--- +85℃
Maximum series fuse	25A
Static Loading	5400pa
Conductivity at ground	≤0.1Ω
Safe class	II
Resistance	≥100 Ω
Connerctor	MC4 Compatible
Bckside Out Ratio*	70%±5%

\*Under STC:Backside Output rattoo=Pmax(rear)/Pmax(front)



12 years  
Quality  
guarantee

30 years  
Power output  
guarantee



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

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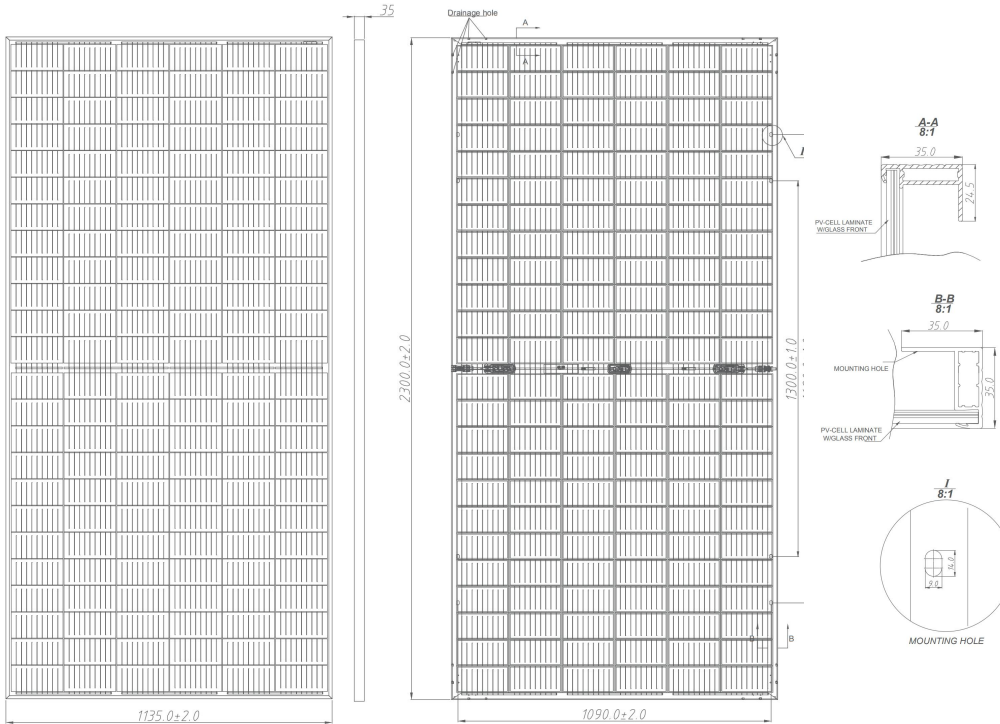
Add:Rm803 Chevalier House 45-51 Chatham Road South Tsim Sha Tsui Hongkong

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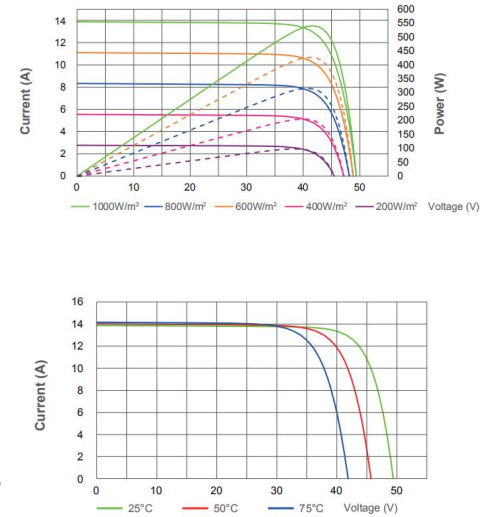
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### Engineering Drawings



### I-V CURVE



customized cable length available upon request

### ELECTRICAL PARAMETERS

Performce at STC(Power Tolerance 0~+3%)

	525	530	535	540	545	550
Maximum power (Pmax/W)	525	530	535	540	545	550
Operating Voltage(Vmpp/V)	40.6	40.8	41.0	41.2	41.4	41.6
Operating Current(Imp/A)	12.94	13.00	13.05	13.11	13.17	13.23
Open-Circuit Voltage(Voc/V)	48.8	49.0	49.2	49.4	49.6	49.8
Short-Circuit Current(Isc/A)	13.71	13.76	13.81	13.87	13.93	13.99
Module Efficiency [%]	20.1	20.3	20.5	20.7	20.9	21.1

### Performance at NMOT

STC:Irradiance 1000w/m<sup>2</sup>, cell Temperature 25°C, air mass Am1.5 NMOT: Irradiance at 800w/m<sup>2</sup>, ambient temperature 20°C Air Mass A1.5, Wind Speed 1m/s

Maximum Power(Pmax/W)	391.6	395.4	398.9	402.8	406.6	410.5
Operating Voltage(Vmpp/V)	37.8	38.0	38.2	38.4	38.6	38.8
Operating Current(Imp/A)	10.35	10.40	10.44	10.49	10.54	10.59
Open-Circuit Voltage(Voc/V)	45.7	45.9	46.1	46.3	46.4	46.6
Short-Circuit Current(Isc/A)	11.05	11.09	11.13	11.18	11.23	11.28

### Electrical Characteristics with different rear side power gain

Pmax gain	Pamx/w	Vmpp/V	Iimp/A	Voc/V	Isc/A
5%	567	41.2	13.77	49.4	14.56
10%	594	41.2	14.42	49.4	15.26
15%	621	41.2	15.08	49.4	15.95
20%	648	41.2	15.73	49.4	16.64
25%	675	41.2	16.39	49.4	17.34

### TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C

(Refer to 540w front)