

# HD SOLAR

## PERC Monocrystalline 144cells M10 Bifacial Half-cell PV module

### HDM-144cells 182 cell 535-555WP bifacial double glass PV 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

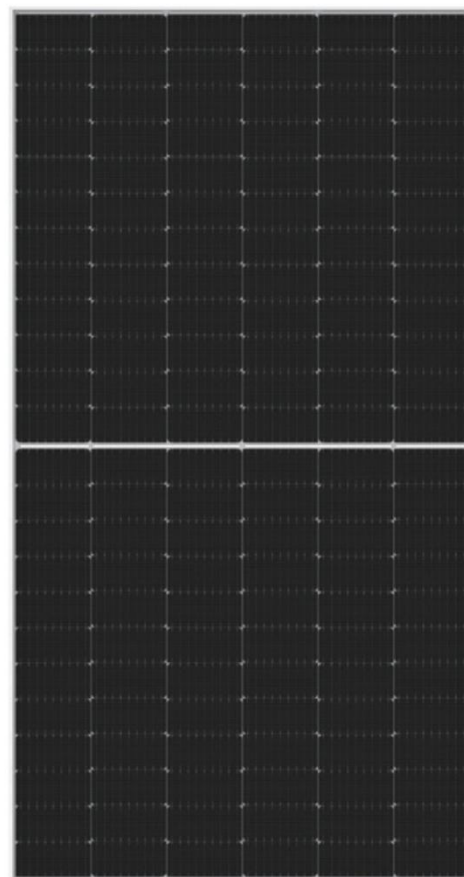
#### MECHANICAL PARAMETERS

Cell(mm)	Mono182×182mm 10BB
Cell Arrangement	144(6*24)
Weight(kg)	32KG(70.5lbs)
Dimensions(L×W×H)(mm)	2278*1134*35mm
CableLength( Portrait)	300mm or Customized
Cable Length(Landscape)	1200mm or Customized
Cabel Cross Section Size	4mm <sup>2</sup> (0.006inches <sup>2</sup> )
Front Glass	2.0mmAR Coated Strengthened Glass
Back Glass	2.0mm Heat Strengthened Glass(White Grid Glass)
No.of Bypass Diodes	3/6
Junction Box	IP68
Frame	Anodized Aluminium alloy
Packing	31pcs/carton 620pcs/40HQ

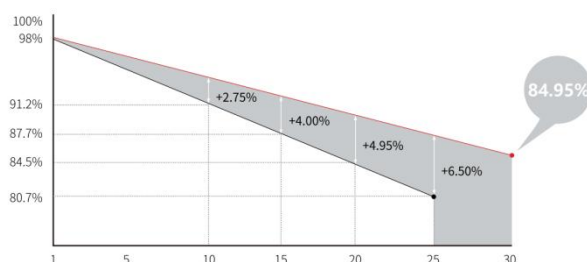
#### WORKING CONDITIONS

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)



30-Year Power Warranty



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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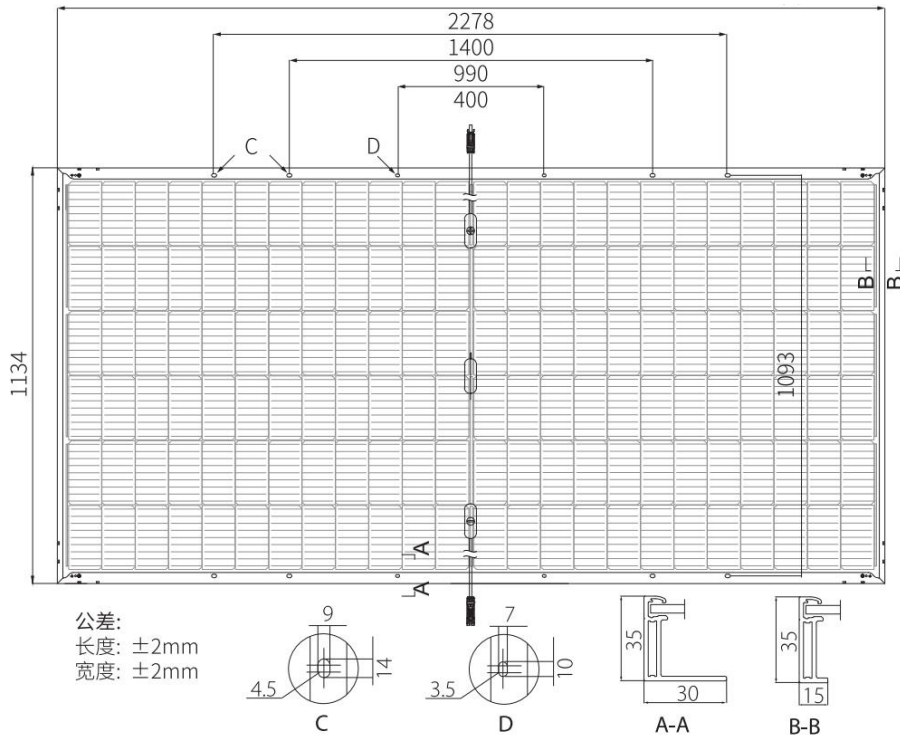
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### Engineering Drawings



公差:  
长度: ±2mm  
宽度: ±2mm

customized cable length available upon request

### ELECTRICAL PARAMETERS

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

	535	540	545	550	555
Maximum power (Pmax/W)	535	540	545	550	555
Operating Voltage(Vmpp/V)	41.50	41.65	41.80	41.95	42.10
Operating Current(Imp/A)	12.90	12.97	13.04	13.12	13.19
Open-Circuit Voltage(Voc/V)	49.35	49.50	49.65	49.80	49.95
Short-Circuit Current(Isc/A)	13.78	13.85	13.92	13.99	14.05
Module Efficiency [%]	20.70	20.90	21.10	21.30	21.50

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

	399.9	403.6	407.4	411.1	414.8
Maximum Power(Pmax/W)	399.9	403.6	407.4	411.1	414.8
Operating Voltage(Vmpp/V)	38.72	38.86	39.00	39.14	39.28
Operating Current(Imp/A)	10.33	10.39	10.45	10.51	10.56
Open-Circuit Voltage(Voc/V)	46.40	46.54	46.68	46.82	46.97
Short-Circuit Current(Isc/A)	11.12	11.17	11.23	11.29	11.34

### Electrical Characteristics with differen rear side power gain

### TEMPERATURE COEFFICIENT

Pmax gain	Pamx/w	Vmpp/V	Imp/A	Voc/V	Isc/A	Temperature Coefficient Pmax	-0.36%/℃
5%	572	41.8	13.69	49.65	14.61	Temperature Coefficient Voc	-0.26%/℃
10%	600	41.8	14.34	49.65	15.31	Temperature Coefficient Isc	+0.043%/℃
15%	627	41.9	14.99	49.75	16.00	NMOT	43±2℃
20%	654	41.9	15.65	49.75	16.70		
25%	681	41.9	16.30	49.75	17.39		

### Packing Configuration

30pcs/Pallet 40HQ 540PCS