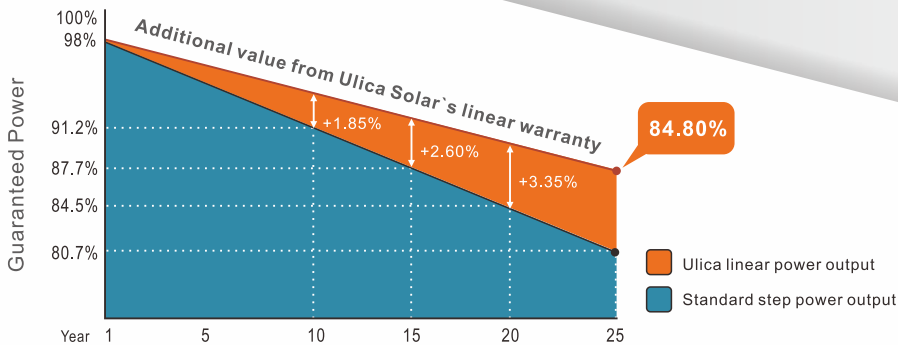


# BIFACIAL MONO PERC MODULE UL-540 | 545 | 550M-144HV 540W~550W 1500V MBB 182mm cell



**Global Tier 1 bankable brand**



**Bifacial Mono PERC Module**

Capable of generating power at back side, at least 70% efficiency of the front side



**Outstanding mechanical load resistance**

2400 Pa wind load, 5400 Pa snow load



**High performance under low light**

Works at cloudy, rainy days



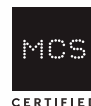
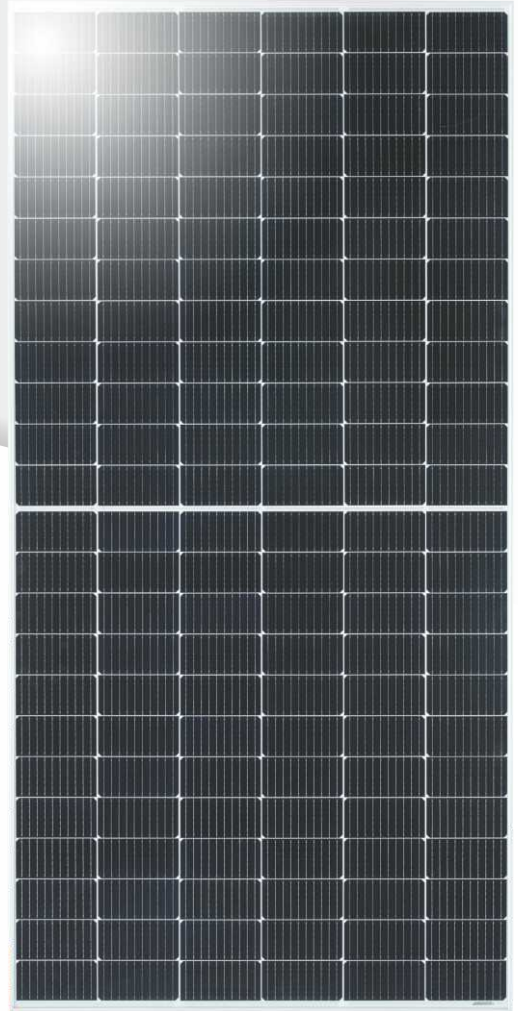
**Anti-PID (potential induced degradation)**

Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours



**Great Durability against extreme conditions**

Passed salt mist corrosion test, ammonia corrosion test, dust & sand test, fire test, all certified by TÜV



CEC Listed



**About Ulica Solar:** As member of Shanshan Group (stock code: 600884) which is TOP500 Enterprise in China, Ulica Solar is the leading manufacturer of solar cells and solar panels in China since 2005, and has been continuously listed as the Tier 1 PV Module Manufacturer from Q1 2020 by Bloomberg NEF, with the annual capacity of 3GW, and own investment projects of 300MW.

## ELECTRICAL PERFORMANCE

Electrical Parameters Standard Test Conditions

Module Type			UL-540M-144HV	UL-545M-144HV	UL-550M-144HV
Power Output	P <sub>max</sub>	W	540	545	550
Power Tolerance	ΔP <sub>max</sub>	W		0/+5W	
Module Efficiency	η <sub>m</sub>	%	20.89	21.09	21.28
Voltage at P <sub>max</sub>	V <sub>m</sub>	V	41.7	41.8	41.9
Current at P <sub>max</sub>	I <sub>m</sub>	A	12.95	13.04	13.13
Open-Circuit Voltage	V <sub>oc</sub>	V	49.8	49.9	50.0
Short-Circuit Current	I <sub>sc</sub>	A	13.60	13.65	13.75

STC:1000w/m2 irradiance,25C module temperature,AM1.5

## THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	43±2
Temperature Coefficient of P <sub>max</sub>	γ	%/°C	-0.360
Temperature Coefficient of V <sub>oc</sub>	β <sub>voc</sub>	%/°C	-0.290
Temperature Coefficient of I <sub>sc</sub>	α <sub>isc</sub>	%/°C	-0.049

## OPERATING CONDITIONS

Max.System Voltage	1500V
Max.Series Fuse Rating	25A
Operating Temperature Range	-40°C~85°C
Max static snow load	5400Pa
Max static windload	3800Pa
Application Class	A

## CONSTRUCTION MATERIALS

Front Cover(material/type/thickness)	3.2mm low-iron tempered glass/ transparent backsheet
Cell(quantity/material/type/dimension)	144/monocrystalline/182x91mm
Encapsulant(material)	ethylene vinyl acetate(EVA)
Frame(material/anodization color)	anodized aluminum alloy/silver or black
Junction Box(protection degree)	IP68
	4mm <sup>2</sup>
Cable(length/cross-sectional area)	Landscape: (+) 1400mm/(-)1400 mm Portrait: (+)400 mm/(-) 200mm
Plug Connector	MC4 compatible

## Electrical characteristics with different rear side power gain(reference to 550W front)

P <sub>max</sub> /W	V <sub>oc</sub> /V	I <sub>sc</sub> /A	V <sub>mp</sub> /V	I <sub>mp</sub> /A	P <sub>max</sub> gain
550	50.0	13.75	41.9	13.13	0
578	50.0	14.44	41.9	13.78	5%
605	50.0	15.13	41.9	14.44	10%
633	50.0	15.81	41.9	15.10	15%
660	50.0	16.50	41.9	15.75	20%

## GENERAL CHARACTERISTICS

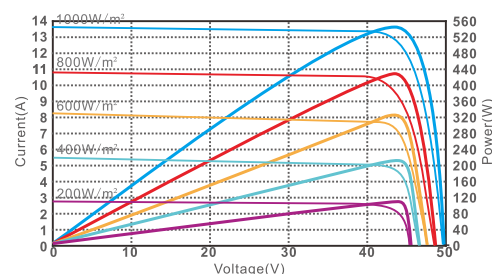
Dimension(L/W/H)	2279/1134/35mm
Weight	27.5kg

## PACKING CONFIGURATION

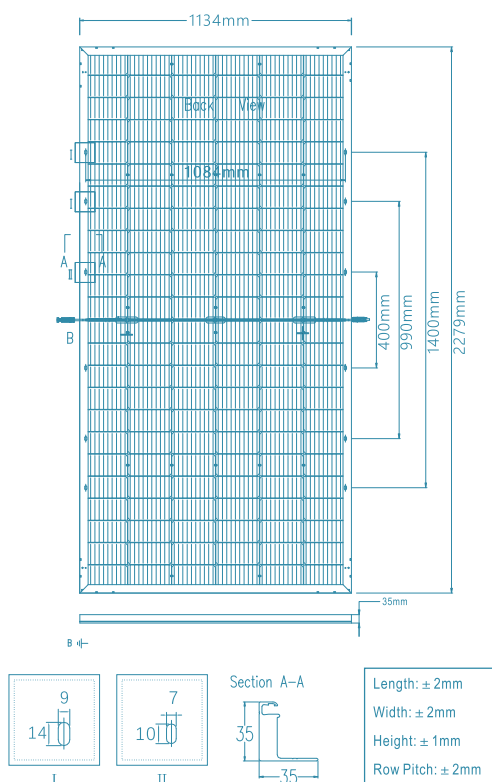
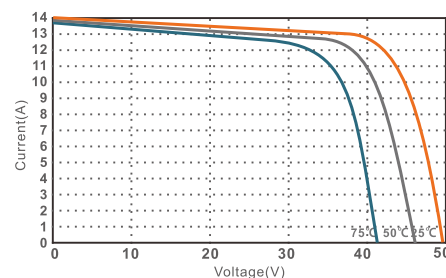
Pallet Size(L/W/H)	2325/1120/2550mm
Pallet Weight	1887kg
Pieces per Pallet	62pcs
Pieces per Container	620pcs

## I-V CURVE

I-V characteristics at different irradiances



I-V characteristics at different temperature



Please read the instruction entirely before handling, installing and operating Ulica Solar modules.

Due to continuous research and development, the specification is subject to change without prior notice.

## INTERNATIONAL CERTIFICATES

- IEC 61215, IEC 61730
- ISO 9001: 2015(Quality management systems)
- ISO 14001: 2015 (Environmental management systems)
- ISO 45001: 2018 (Occupational health and safety)
- UNI 9177 Ia CLASSE DI REAZIONE AL FUOCO:1