

## MONO HALF-CUT MODULE UL-540 | 545 | 550M-144HV 540W-550W 1500V MBB 182mm cell





Global Tier 1 brand as announced by Bloomberg NEF



Lower LCOE Lower shading and resistive loss Lower temperature coefficient



Outstanding mechanical load resistance 3800 Pa wind load, 5400 Pa snow load



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 TUV



World famous insurance CHUBB(USA), Solar Insurance&Finance(Netherlands)

CHUBB ear product warran ear linear power warrant



**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 1.2GW, and own investment projects of 300MW.



# **MONO** UL-540 | 545 | 550M-144HV

## **ELECTRICAL PERFORMANCE**

Electrical Parameters S	tandard Test	Conditions
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Module Type		UL	-540M-144HV	UL-545M-144HV	UL-550M-144HV
Power Output	Pmax	W	540	545	550
Power Tolerance	$\triangle Pmax$	W		0/+5W	
Module Efficiency	ηm	%	20.84	21.09	21.28
Voltage at Pmax	Vm	V	41.7	41.8	41.9
Current at Pmax	Im	А	12.95	13.04	13,13
Open-Circuit Voltage	Voc	V	49.8	49.9	50.0
Short-Circuit Current	lsc	А	13.60	13.65	13.75

STC:1000w/m<sup>2</sup> irradiance.25C module temperature.AM1.5

#### THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	43±2	
Temperature Coefficient of Pmax	Y	%/°C	-0.360	
Temperature Coefficient of Voc	βνος	%/°C	-0.290	
Temperature Coefficient of Isc	αisc	%/°C	+0.049	

#### **OPERATING CONDITIONS**

Max.System Voltage	DC1500V
Max.Series Fuse Rating	25A
Operating Temperature Range	-40°C~85°C
Max static snow load	5400Pa
Max static wind load	3800Pa
Application Class	А

#### **CONSTRUCTION MATERIALS**

Front Cover(material/type/thickness)	low-iron tempered glass/3.2mm
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
Cable(length/cross-sectional area)	$400 \text{mm}(\text{or Customized Length})/4 \text{mm}^2$
Plug Connector	MC4 compatible

## **GENERAL CHARACTERISTICS**

Dimension(L/W/H)	2279/1134/35mm
Weight	28.3kg

#### **PACKING CONFIGURATION**

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

## **INTERNATIONAL CERTIFICATES**

IEC 61215, IEC 61730 ISO 9001: 2015(Quality management systems) ISO 14001: 2015 (Environmental management systems) OHSAS 18001: 2015 (Occupational health and safety)

## I-V CURVE





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.