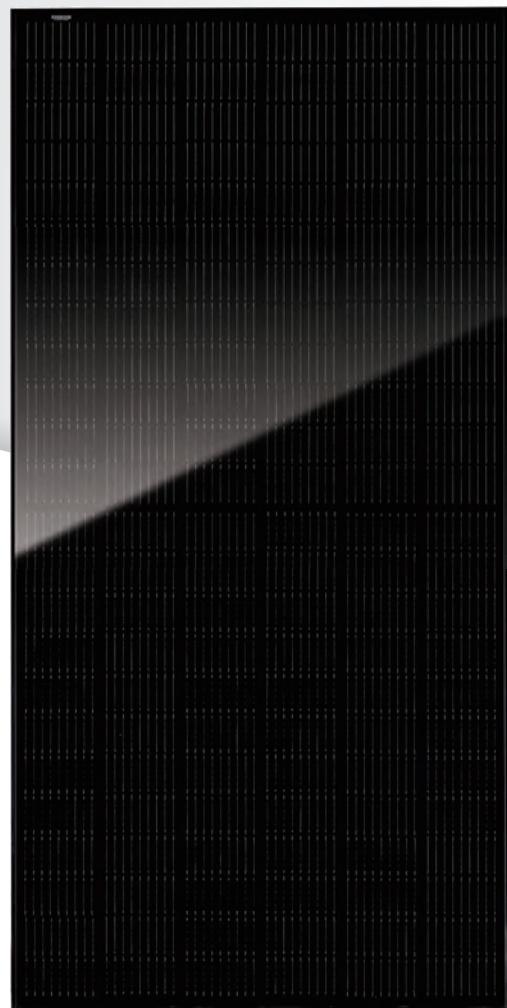
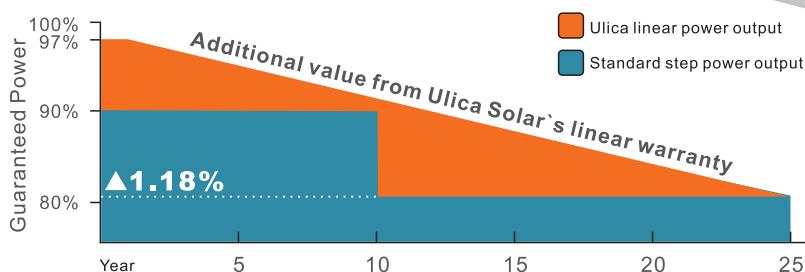


# MONO HALF-CUT MODULE

## UL-420 | 425 | 430M-144

### 435W~445W 1500V



Global Tier 1 bankable brand



12% more power than conventional modules



Lower power degradation  
Lower internal current  
Lower hot spot temperature



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)



**About Ulca Solar:** As member of Shanshan Group (stock code: 600884) which is TOP500 Enterprise in China, Ulca Solar is the leading manufacturer of solar cells and solar panels in China since 2005, and the global Tier 1 brand as announced by Bloomberg NEF of Q1 2020, with the annual capacity of 800MW, and own investment projects of 300MW.

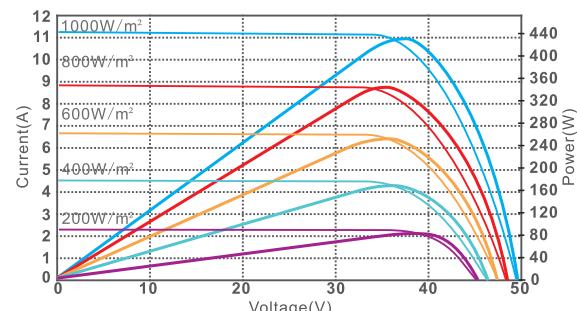
**ELECTRICAL PERFORMANCE**

Electrical Parameters Standard Test Conditions

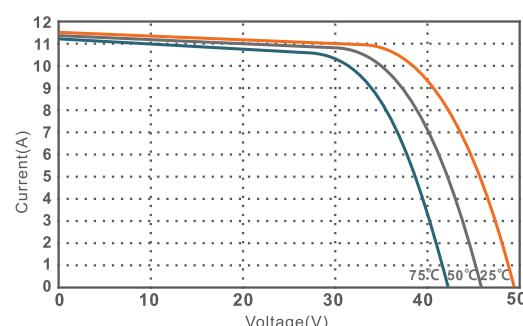
Module Type	UL-420M-144			UL-425M-144	UL-430M-144
Power Output	Pmax	W	420	425	430
Power Tolerance	△Pmax	W		0/+5W	
Module Efficiency	η	m%	19.01	19.24	19.46
Voltage at Pmax	V <sub>m</sub>	V	40.4	40.5	40.6
Current at Pmax	I <sub>m</sub>	A	10.40	10.49	10.59
Open-Circuit Voltage	V <sub>oc</sub>	V	49.2	49.3	49.4
Short-Circuit Current	I <sub>sc</sub>	A	10.95	11.04	11.15

STC:1000W/m<sup>2</sup> irradiance,25°C module temperature,AM1.5**I-V CURVE**

I-V characteristics at different irradiances



I-V characteristics at different temperature

**THERMAL CHARACTERISTICS**

Nominal Operating Cell Temperature	NOCT	°C	43±2
Temperature Coefficient of Pmax	γ	%/°C	-0.360
Temperature Coefficient of Voc	β <sub>voc</sub>	%/°C	-0.330
Temperature Coefficient of Isc	α <sub>isc</sub>	%/°C	+0.049

**OPERATING CONDITIONS**

Max.System Voltage	1500V
Max.Series Fuse Rating	20A
Operating Temperature Range	-40°C ~ 85°C
Max static snow load	5400Pa
Max static wind load	3800Pa
Application Class	A

**CONSTRUCTION MATERIALS**

Front Cover(material/type/thickness)	low-iron tempered glass/3.2mm
Cell(quantity/material/type/dimension)	144/monocrystalline/ 166X83mm
Encapsulant(material)	ethylene vinyl acetate(EVA)
Frame(material/anodization color)	anodized aluminum alloy
Junction Box(protection degree)	IP68
Cable(length/cross-sectional area)	1300mm/4mm <sup>2</sup>
Plug Connector	MC4 compatible

**GENERAL CHARACTERISTICS**

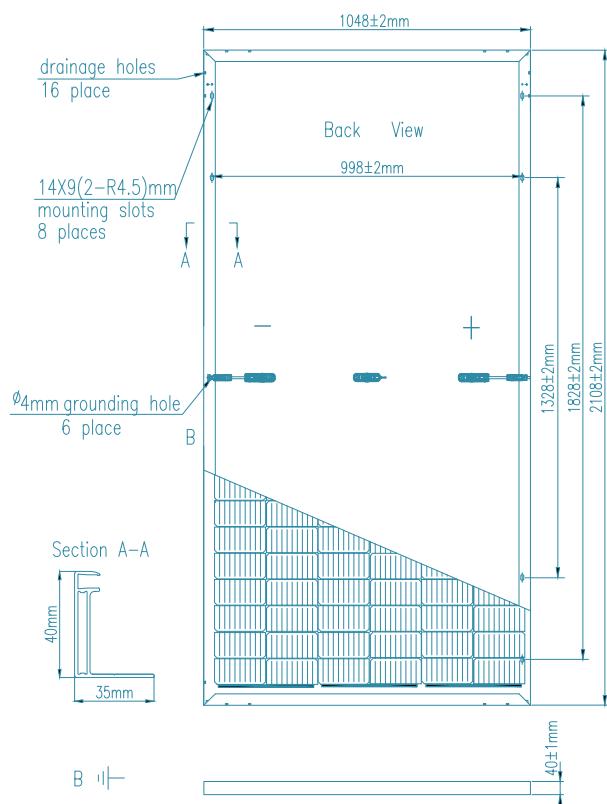
Dimension(L/W/H)	2108/1048/40mm
Weight	24.2kg

**PACKING CONFIGURATION**

Pallet Size(L/W/H)	2150/1120/2500mm
Pallet Weight	1406kg
Pieces per Pallet	52pcs+2pcs
Pieces per Container	594pcs

**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)



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.