



ocean solar

**Full Black
Transparent Backsheet Series**

**AOX-144M10RHC
430W-460W**

HIGH VALUE

Low LCOE, reduced BOS cost, quick payback.
More harvest with N-type TOPCon.
Compatible, efficient container use cuts freight.

HIGH POWER UP TO 460W

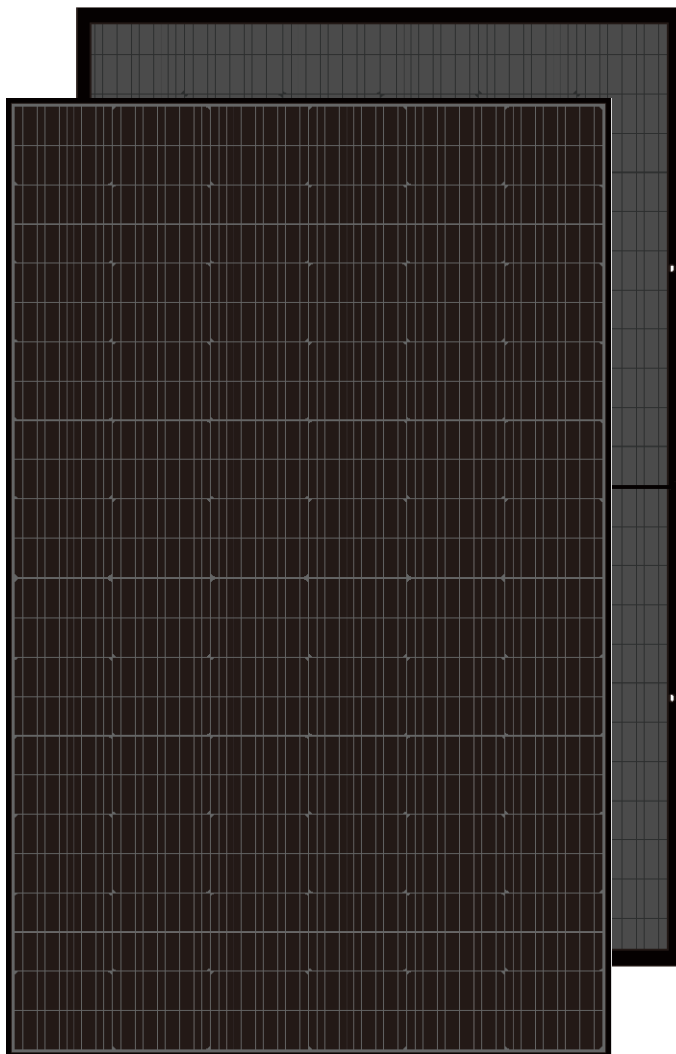
23.0% module efficiency, dense interconnect.
SMBB for trapping, lower resistance, better collection.

RELIABLE

Fewer micro-cracks, PID resistant, endure harsh conditions.
Mechanical performance up to 5400 Pa positive, 2400 Pa negative.

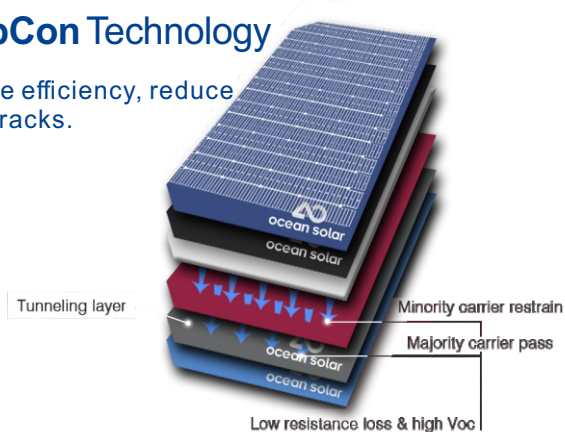
HIGH ENERGY YIELD

Excellent IAM, low irradiation validated by 3rd party certs.
Lower degradation: 1% first year, 0.4% annually.
Lower temperature coefficient (-0.30%).
Up to 30% extra power gain from back side depending on albedo.



N-TopCon Technology

Enhance efficiency, reduce micro-cracks.

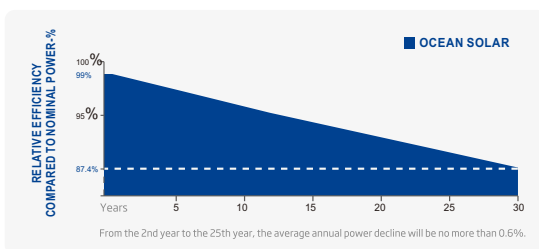


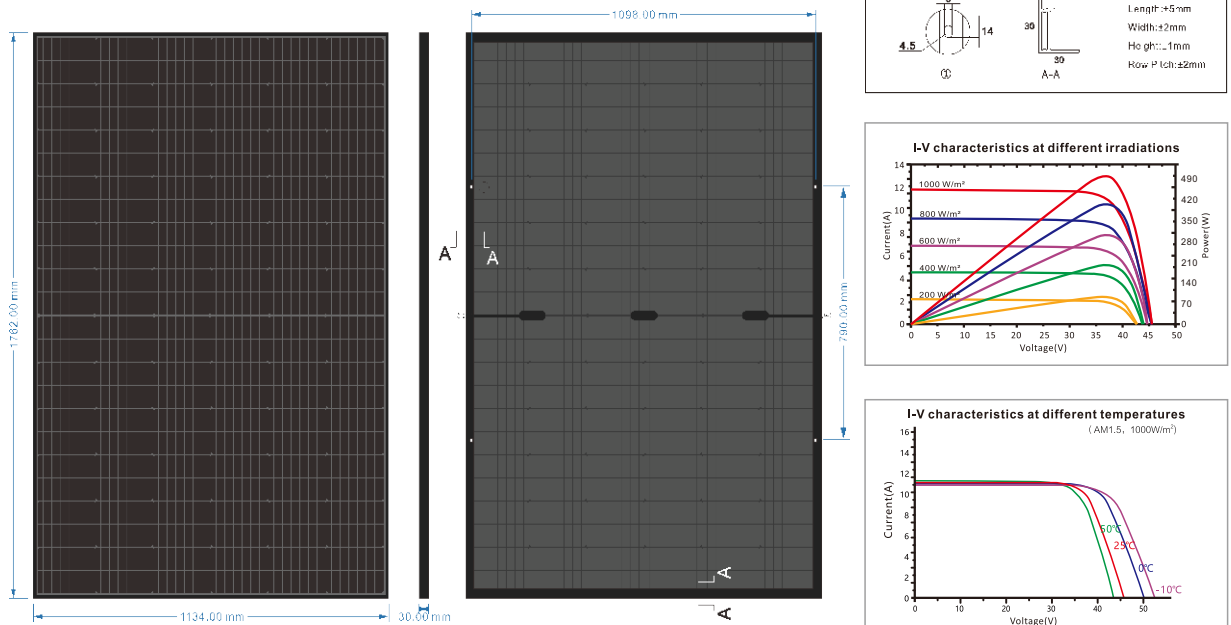
PRODUCT Certifications



PRODUCT Warranty

12-year Warranty for Materials and Processing
30-year Warranty for Extra Linear Power Output





Electrical Characteristics STC:AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax:±3%

Module Type	AOX-144M10RHC430W		AOX-144M10RHC435W		AOX-144M10RHC440W		AOX-144M10RHC445W		AOX-144M10RHC450W		AOX-144M10RHC455W		AOX-144M10RHC460W	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	430W	327W	435W	330W	440W	334W	445W	337W	450W	340W	455W	344W	460W	347W
Voltage at Maximum Power(Vmp/V)	42.20	39.40	42.40	39.60	42.60	39.80	42.80	40.00	43.00	40.20	43.20	40.40	43.40	40.60
Current at Maximum Power(Imp/A)	10.19	8.30	10.26	8.33	10.33	8.39	10.40	8.43	10.47	8.46	10.54	8.52	10.60	8.55
Open Circuit Voltage(Voc/V)	50.20	47.40	50.40	47.60	50.60	47.80	50.80	48.00	51.00	48.20	51.20	48.40	51.40	48.60
Short Circuit Current(Isc/A)	10.76	8.76	10.83	8.80	10.91	8.86	10.98	8.90	11.06	8.93	11.12	8.99	11.19	9.03
Module Efficiency(%)	21.50%		21.80%		22.00%		22.30%		22.50%		22.80%		23.00%	

Mechanical Parameters

Cell Orientation	6*24(144)solar half cells
Junction Box	IP 68 3 diodes
Output Cable	4.0mm ² solar cable(IEC) (+)≥350mm(-)≥350mm or customized
Front Glass	3.2 mm, Anti-reflection Coating, High Transmission, Low Iron, Fully Strengthened Glass
Frame	30mm Anodized Aluminium Alloy
Weight	21kg(+/-0.5kg)
Dimension	1762*1134*30mm
Packaging	36pcs/pallet,936pcs/40HQ Container

Tip: The number of double-glass modules placed flatly cannot exceed 15 pieces.

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax)	452W	457W	462W	467W	473W	478W	483W
	Module Efficiency STC (%)	22.58%	22.89%	23.10%	23.42%	23.63%	23.94%	24.15%
10%	Maximum Power (Pmax)	473W	479W	484W	490W	495W	501W	506W
	Module Efficiency STC (%)	23.65%	23.98%	24.20%	24.53%	24.75%	25.08%	25.30%

Operating Parameters

Operational Temperature	-40~+85°C
Power Output Tolerance	0~5W
Voc and Isc Tolerance	±3%
Maximum System Voltage	1000/1500VDC(IEC)
Maximum Series Fuse Rating	25A
Nominal Operational Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

Temperature Ratings(STC)

Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Product Warranty

Warranty for Materials and Processing	12 Years
Warranty for Extra Linear Power Output	30 Years

 High-tech enterprises in China



Ocean Solar

E-mail: info@oceansolar.cn

Web: www.oceansolar.cn

©2024 Ocean Solar All rights reserved.

Specifications included in this datasheet are subject to change without notice.



ocean solar