RI solar
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TOPCon
Technology

ORISun N-Type OSD8DH7216H
TOPCon High-Efficiency Dual Glass Solar Module With MBB Technology

Intelligent Manufacturing, High-Performance N-type Solar cell

Industry-leading intelligent and efficient production lines, with the highest quality standards in the industry. Ensuring the most cost-effective production.

Higher Yield

High power, low temperature coefficient, high bifaciality ensuring the product can generate more energy benefits even in cloudy or hot weather with the same area. The bifaciality power gain increases with the backside illumination which can reach up to 25% or more.

Extremely Durable

Thanks to the optimal material matching and interconnection encapsulation technology, the product has outstanding module weather resistance performances. The overall module has passed the certification of 2400Pa wind load and 5400Pa snow load, while minimizing the degradation caused by PID.

Guaranteed Reliability

Industry leading 30 year product and performance linear warranty. Adopting the most advanced N-type mass production technology to ensure low LID and LETID degradation.

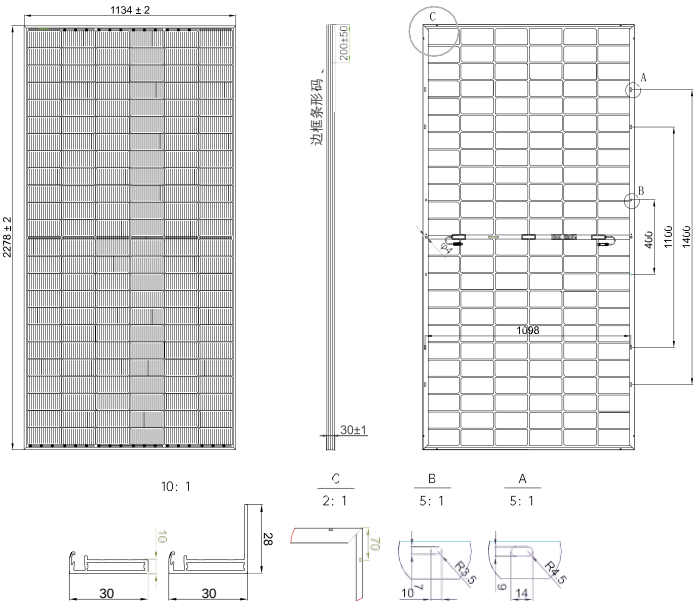
Extremely Elegant

Simple and elegant industrial design, suitable for various application scenarios.

575-595 Watt
Higher Energy Output

Mechanical Structure Specifications

Dimensions	2278 x 1134 x 30 mm / 89.7 x 44.7 x 1.2 in
Weight	32 kg / 70.5 lbs
Front Material	Tempered high transparency photovoltaic glass, 2.0 mm / 0.08 in, anti reflective film
Back Material	Semi tempered photovoltaic glass, 2.0 mm / 0.08 in,
Frame	Anodized aluminum alloy
Cell Type	144Half piece, N-type monocrystalline silicon bifacial TOPCon solar cells
Junction Box	Protection grade IP68
Cable	Wireway: 4 mm²/TÜV, Length (+):300 mm/11.81 in & (-):200 mm



Packaging and Transportation

2334 mm	1140 mm	1249 mm	36 modules	29070 kg	25 pallets

Transport by container or truck. For truck freight, each pallet has a loading capacity of 17.5 meters and a height of 3.5-4.5 meters.

Module Electrical Performance Specifications [1]

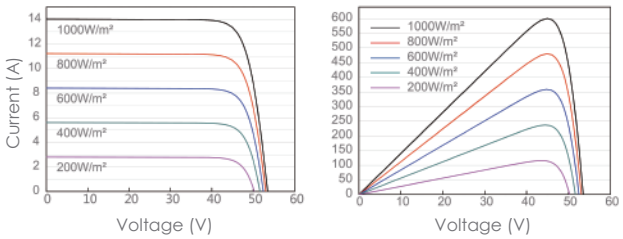
Module model	Efficiency	Power*		Short-circuit current		Open circuit current		Optimal operating current		Optimum operating voltage	
	η	Pmax		Isc		Voc		Impp		Vmpp	
	[%]	[W]		[A]		[V]		[A]		[V]	
	STC[2]	NOCT[3]	**STC**	NOCT	**STC**	NOCT	**STC**	NOCT	**STC**	NOCT	**STC**
575	**22.26**	433	**575**	11.17	**13.48**	48.89	**51.19**	10.67	**13.30**	40.58	**43.22**
580	**22.45**	437	**580**	11.22	**14.03**	49.05	**52.29**	10.71	**13.37**	40.79	**43.39**
585	**22.65**	441	**585**	11.27	**14.07**	49.24	**52.48**	10.77	**13.44**	40.94	**43.53**
590	**22.84**	445	**590**	11.32	**14.13**	49.48	**52.64**	10.82	**13.49**	41.14	**43.72**
595	**23.03**	449	**595**	11.36	**14.17**	49.86	**52.85**	11.93	**13.51**	41.48	**44.05**

* (Power tolerance 0 W / +5 W for STC)

Bifacial Power Generation Performance (Rearside gain)

5%	Pmax	**604Wp**	609Wp	**614Wp**	620Wp	**625Wp**
	Efficiency	**23.37%**	23.57%	**23.78%**	23.98%	**24.18%**
15%	Pmax	**661Wp**	667Wp	**673Wp**	679Wp	**684Wp**
	Efficiency	**25.60%**	25.82%	**26.04%**	26.27%	**26.49%**
25%	Pmax	**719Wp**	725Wp	**731Wp**	738Wp	**744Wp**
	Efficiency	**27.82%**	28.07%	**28.31%**	28.55%	**28.79%**

I-V Curve Under Different Illuminances



Temperature Coefficient

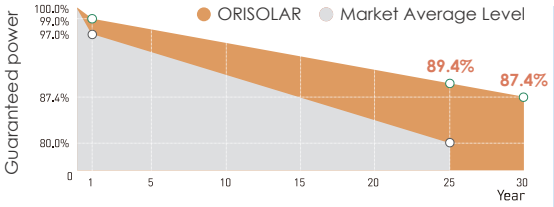
Isc TEMP coefficient	α	[%/K]	+0.045
Voc TEMP coefficient	β	[%/K]	-0.25
Pmpp TEMP coefficient	γ	[%/K]	-0.29
Nominal operating TEMP	NOCT	[°C]	45±2

The temperature coefficient described is a linear value.

System Related Technical Parameters

Maximum system voltage	[V]	1500
Maximum rated fuse current	[A]	30
Security level		II
Fire rating(UI61730)		A
Operating temperature range	[°c]	-40 to +85
Reference bifacial factor	[%]	80±5

Industry Leading Linear Quality Assurance



1% 1st Year Degradation

0.4% Linear Power After The 1st Year

30 Years Product Power Linear Warranty

Related Certifications

IEC IEC 61215:2016, IEC 61730:2016, UL 61730-1, UL 61730-2, PID (IEC 62804), Salt Mist (IEC 61701)

Note: All data and specifications are preliminary and may change without notice. For installation and operation instructions, please refer to the installation guide.

Passed Multiple IEC Standards With 3x Reliability And Weather Resistance Testing Procedures

1x IEC — Average Standard

3x IEC — The Lowest Testing Level Of Orisolar

[1] Power test according to IEC 60904-3, test tolerance: 0~+3%
[2] STC condition: Light intensity 1000 W/m ², Component temperature 25 ° C, AM1.5G spectral conditions
[3] NMOT: nominal component operating temperature, light intensity 800 W/m ², AM1.5G spectral conditions, ambient temperature 20 ° C