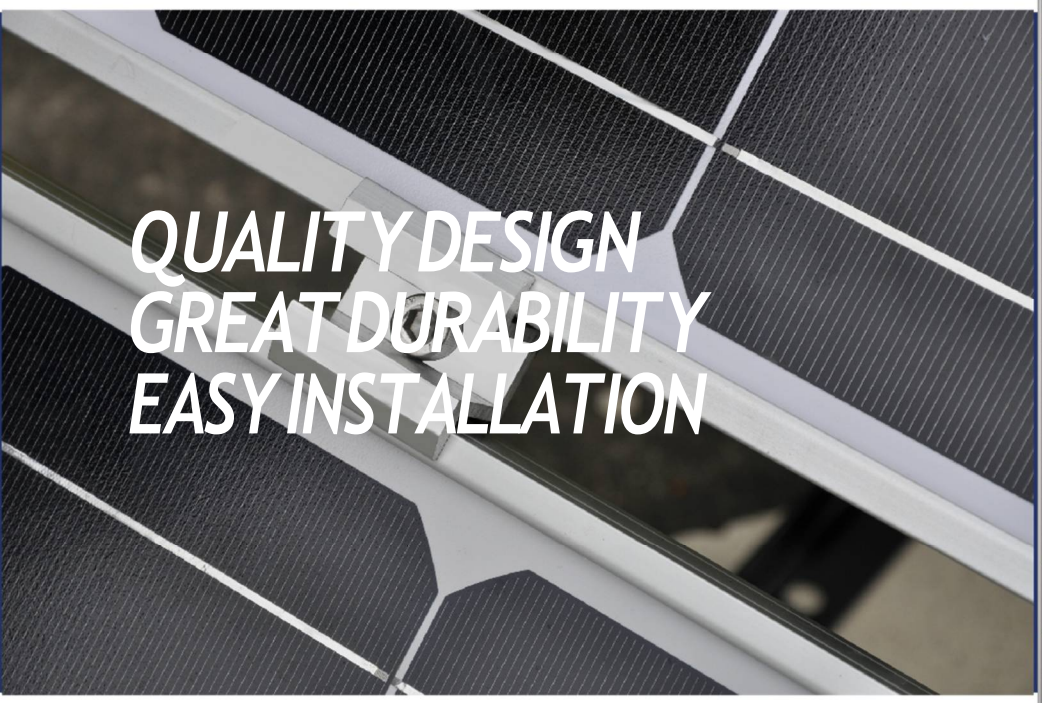
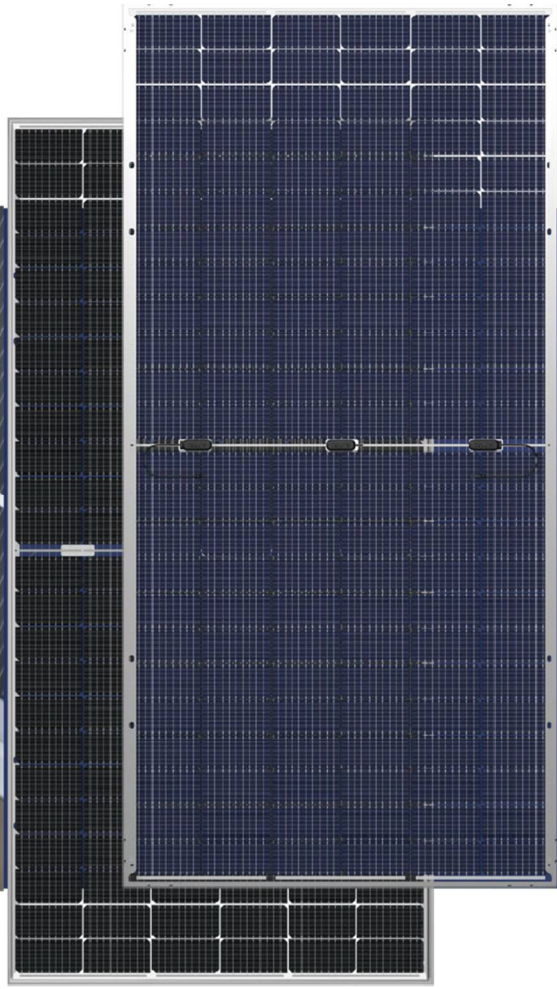
SARONIC
SOLAR ENERGY SOLUTIONS





HALF MONO 144PCS

BIFACIAL SERIES MODULE

5BB cell MBB cell

* Both 5BB and MBB modules will be supplied.

Industry leading module power output warranty
International quality, safety and performance certifications.

The backside makes use of the reflected and scattered light from the surroundings, the modules can yield up to 5%~30% power more,depending on the albedo.

Manufacturing facility certified to ISO9001 quality management system standards.

Beautiful appearance, good durability & easy installation.

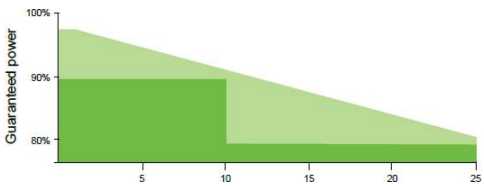
Special design in accordance with requirements of customers.

15 YEARS — ***FOR PRODUCT DEFECTS IN MATERIALS I WORKMANSHIP***

12 YEARS — ***FOR 90% OF WARRANTED MINIMUM POWER OUTPUT***

25 YEARS — ***FOR 80% OF WARRANTED MINIMUM POWER OUTPUT***

30 YEARS — ***LINEAR WARRANTY***



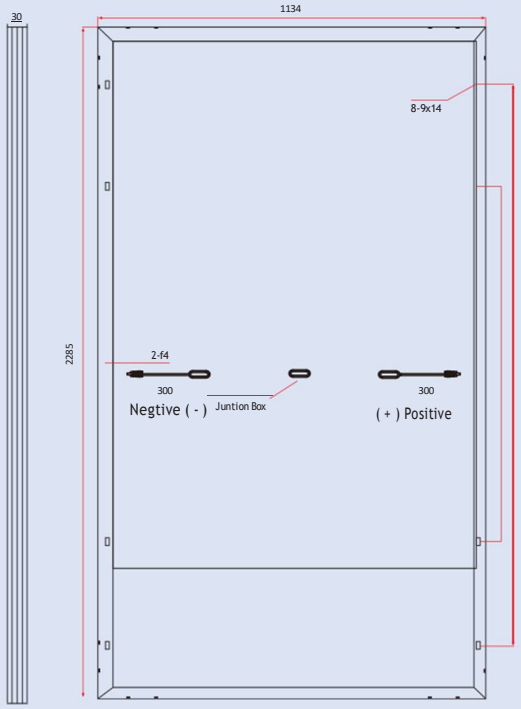
CQC MCS TÜV NORD Type Tested TÜV NORD TÜV SÜD CE

OHSAS 18001 **ISO 9001** **ISO 14001**

SR-550/545/540/535/-144HM

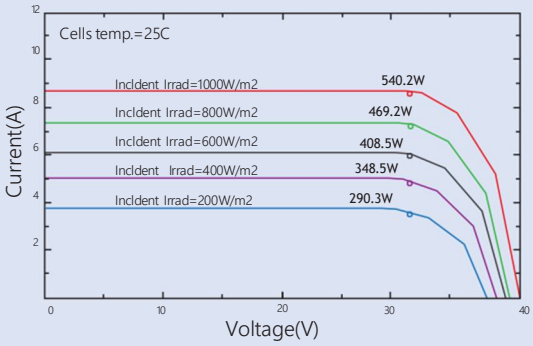
Product Specification

DIMENSIONS AND STRUCTURE

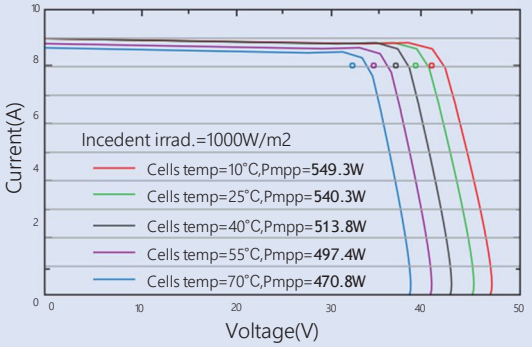


I-V CURVE

I-V CURVES AT DIFFERENT IRRADIANCE



I-V CURVES AT DIFFERENT TEMPERATURE



ELECTRICAL PARAMETERS AT STANDARD TEST CONDITIONS (STC:AM=1.5, 1000W/M2, CELLS TEMPERATURE 25℃)

Typical type	550W		545W		540W		535W	
Testing Condition	Front	Back	Front	Back	Front	Back	Front	Back
Max power (Pmax)	550	411	545	407.3	540	403.5	535	399.8
Max power voltage (Vmp)	42.10	39.24	41.93	39.08	41.76	38.92	41.60	38.77
Max power current (Imp)	13.06	10.48	13.00	10.42	12.93	10.37	12.86	10.31
Open circuit voltage (Voc)	50.10	17.34	49.90	47.16	49.70	46.97	49.50	46.78
Short circuit current (Isc)	13.90	11.27	13.81	11.20	13.72	11.13	13.61	11.04
Module Efficiency (%)	21.22	15.86	21.03	15.71	20.83	15.57	20.64	15.42
Max system voltage	DC 1500(TUV)							
Maximum Series Fuse Rating	20A							

ELECTRICAL PARAMETERS @ NOCT

Electrical characteristics with different rear power gain (reference to 440 W)

Power Gains	Pmax	Vmp	Imp	Voc	Isc
5%	567WP	41.93V	13.52A	49.90V	14.35A
10%	594WP	41.93V	14.17A	49.90V	15.03A
15%	621WP	41.94V	14.81A	49.91V	15.71A
20%	648WP	41.94V	15.45A	49.91V	16.39A
25%	675WP	41.95V	16.09A	49.92V	17.07A

MECHANICAL DATA

Dimensions	2285×1134×30mm
Weight	32.8kgs
Front glass	2.0 mm tempered glass
Output cables	4 mm² (-) 350 mm and (+) 160 mm in length
Connectors	MC4 comoatible ≥IP67
Cell type	Mono Cell 182*91 mm
Number of cells	144 cells in series

TEMPERATURE CHARACTERISTICS

Temp.Coeff.of Isc(TK Isc)	0.059% / ℃
Temp.Coeff.of Voc(TK Voc) ℃ Temp.Coeff.of	(-0.30%) / ℃
Pmax(TK Pmax)	(-0.39%) / ℃
Operating temperature	(-40~+85%) ℃
Normal operating cell temperature	45±2℃

PACKING CONFIGURATION

Container	20 GP	40 HQ
Pieces per pallet	72	72
Pallets per container	4	10
Pieces per container	288	720

TESTS,CERTIFICATIONS

Standard tests	IEC 61215, IEC 61730
System certs	ISO 9001, ISO14001
Certifications	CQC,TUV,CE,MCS,CEC,CHUBB
Extreme wind and	Withstand extreme wind(2400 Pascal)
Snow loads testing	Snow loads(5400 Pascal)
Positive tolerance	0~+5W
Junction box	≥IP67