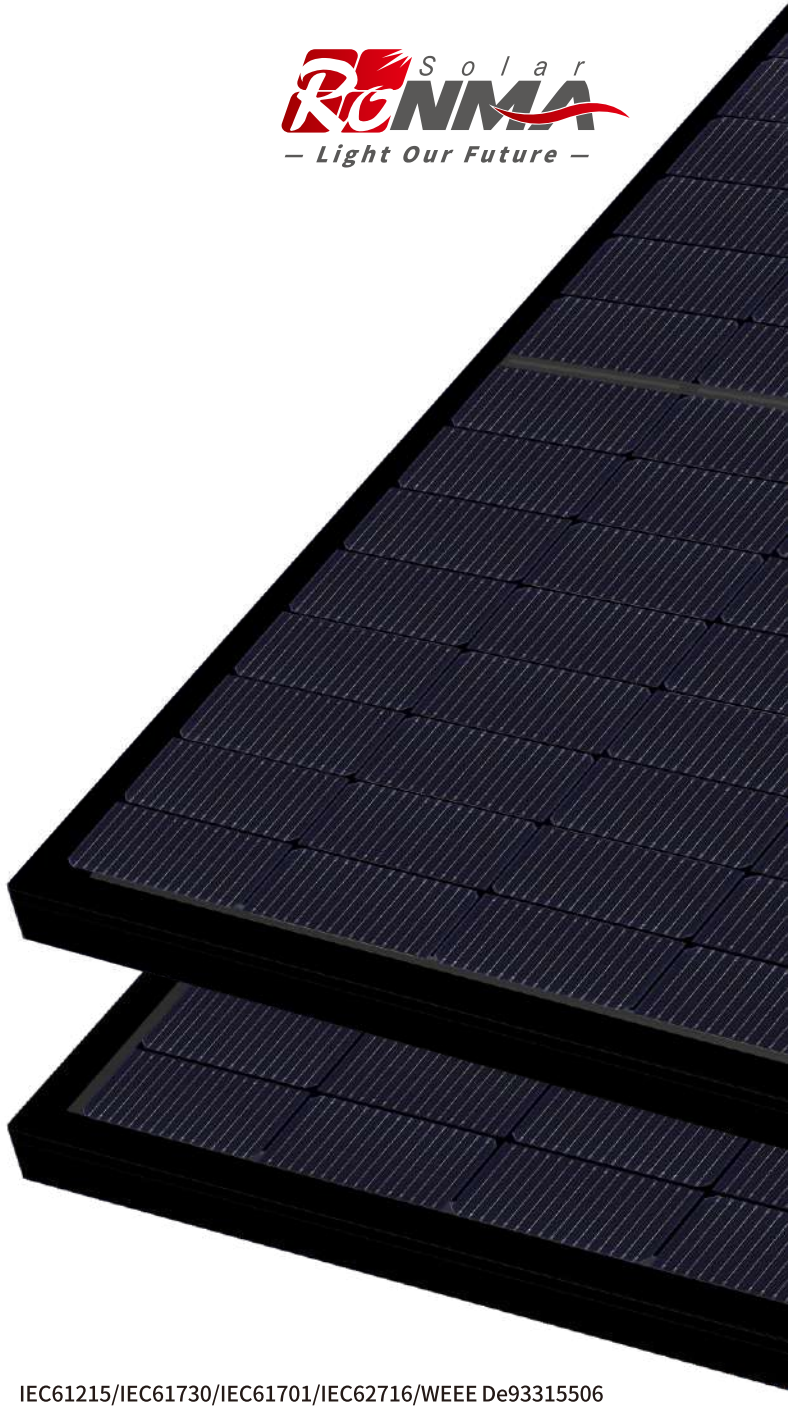
Solar RONMA
— Light Our Future —

series
SKYMAX
RM-490-515W-182R/108TB

N-TOPCon
Bifacial Monocrystalline Module

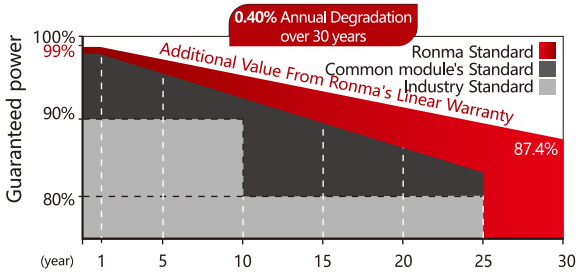
- Suitable for distributed PV Generation
- Warranty Upgrades.
- High efficiency and strong power generation.
- Safer smart manufacturing.



1960×1134×30
Dimensions (mm)

108 CELL	490-515Wp
Mono TOPCon	Power output
1500V DC	**23.17%**
Max. system voltage	Max. efficiency

LINEAR PERFORMANCE WARRANTY
15-year product warranty / 30-year linear power warranty



IEC61215/IEC61730/IEC61701/IEC62716/WEEE De93315506

Higher Power Output
Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR.
0-5w positive tolerance output warranty.

Multi Busbar Technology
By improving optical utilization rate, power increases by 2~3% and efficiency increases by 0.4~0.6%.

PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and material control.

Low-light Performance
Excellent performance in low light.

Durability Against Extreme Environmental Conditions
High salt mist and ammonia resistance certified by TUV NORD.

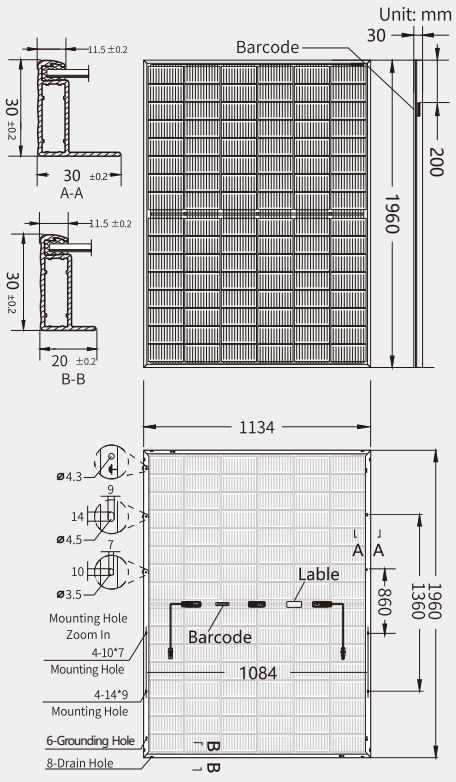
EL Full Inspection
Dual-stage 100% EL Inspection.

SKYMAX series

RM-490-515W-182R/108TB

N-TOPCon | Bifacial Monocrystalline Module

Dimensions of PV Module



ELECTRICAL CHARACTERISTICS (STC*)

Rated Power in Watts-Pmax(Wp)	490	495	500	505	510	515
Open Circuit Voltage-Voc(V)	38.86	39.03	39.20	39.37	39.54	39.71
Short Circuit Current-Isc(A)	15.78	15.84	15.90	15.96	16.02	16.08
Max. Power Voltage-Vmpp(V)	33.16	33.33	33.50	33.67	33.84	34.01
Max. Power Current-Impp(A)	14.78	14.86	14.93	15.00	15.08	15.15
Module Efficiency(%)	21.05	21.27	22.50	22.72	22.95	23.17
Maximum system voltage	1500V DC					
Fuse Rating(A)	25					
Temperature coefficient Pmax	-0.29%/°C					
Temperature coefficient Isc	0.045%/°C					
Temperature coefficient Voc	-0.25%/°C					

*STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5

WORKING CHARACTERISTICS (NOCT*)

Rated Power in Watts-Pmax(Wp)	541.20	546.60	552.10	557.60	563.40	568.6
Open Circuit Voltage-Voc(V)	39.06	39.23	39.40	39.57	39.74	39.91
Short Circuit Current-Isc(A)	17.34	17.39	17.46	17.53	17.60	17.66
Max. Power Voltage-Vmpp(V)	33.36	33.53	33.70	33.87	34.04	34.21
Max. Power Current-Impp(A)	16.22	16.30	16.38	16.46	16.55	16.62
Power tolerance	0~+3%					
NOCT	45°C±2°C					
Operating Temperature	-40°C~85°C					

*NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Electrical characteristics with different rear side power gain

	Pmax/W	Voc/V	Isc/A	Vmpp/V	Impp/A
5%	458	41.09	14.49	33.88	13.95
10%	479	41.09	15.18	33.88	14.62

The additional gain from the rear side compared to the power of the front side at the standard test condition.
It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

MECHANICAL CHARACTERISTICS

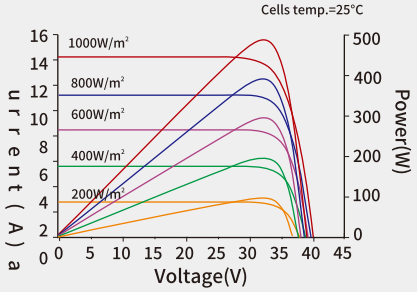
Number of cells	108pcs	Type of frame	Anodized Aluminum Alloy
Type of cell	N-TOPCon Mono	Size of module(mm)	1960×1134×30
Thickness of glass(mm)	2.0	Weight(kg)	22.7
Junction box	IP68, 1500V DC, 3 Diodes	Cables/connectors	4.0mm², MC4 compatible
Length of Cable	+300mm/-200mm (connector included) Length can be customized		

PACKAGING CONFIGURATION

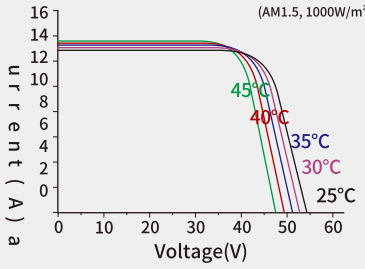
Height of Modules (mm)	30
Number of Modules Per Pallet	36
Packaging Box Dimensions (l×w×h) (mm)	2000x1140x1250
Box Gross Weight (kg)	840
Number of Modules Per 40ft (HQ) Container	864
Number of Pallets Per 40ft (HQ) Container	24

RM-515W-182R/108TB

I-V characteristics at different irradiations



I-V characteristics at different temperatures



CAUTION：READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT

©2023 Ronma Solar. All rights reserved. Specifications included in this datasheet are subject to change without notice.

Solar RONMA — Light Our Future —

Ronma Solar Group
Web: www.ronmasolar.com
E-mail: info@ronmasolar.com