

SKYMAX^{series}

RM-440W-182M/108TB

N-TOPCon
Bifacial Monocrystalline Module

1722×1134×35/30 182×91

Module dimensions (mm) Cell size (mm)

108CELL 420-440Wp

Mono TOPCon module Power output

1500V DC 22.53%

Max. system voltage Max. efficiency

KEY FEATURES



Higher Power Output

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



Optimal Choice for Ultra-large Power Plants

Contribute to Lower BOS cost and LCOE.



ZERO LID

N-Type cell is characterized by "0" LID, which generates more power



PID Resistance

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



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV NORD. Lower temperature coefficient and operating temperature.



More Outstanding Low-light Performance

Higher power output even under low-light environments like on cloudy days



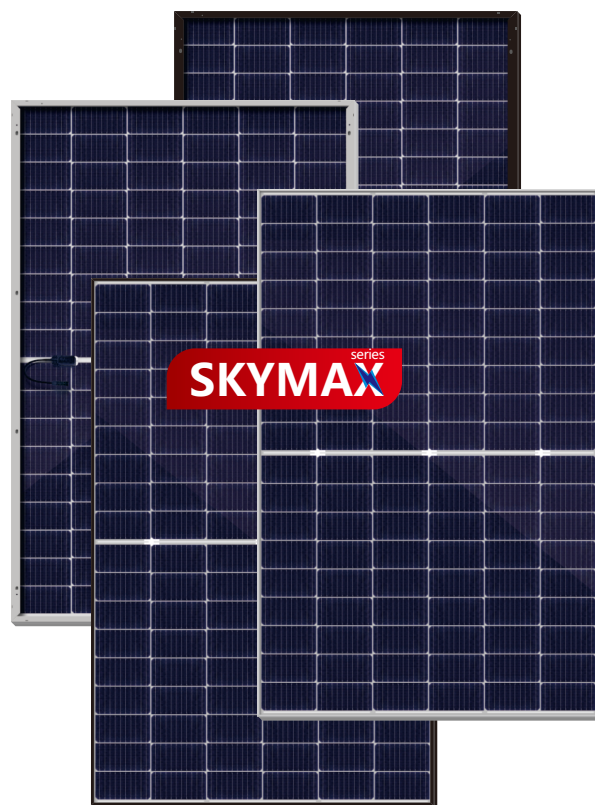
Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



EL Full Inspection

Dual stage 100% EL Inspection warranting defect-free product.



Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716

ISO 9001: Quality Management System

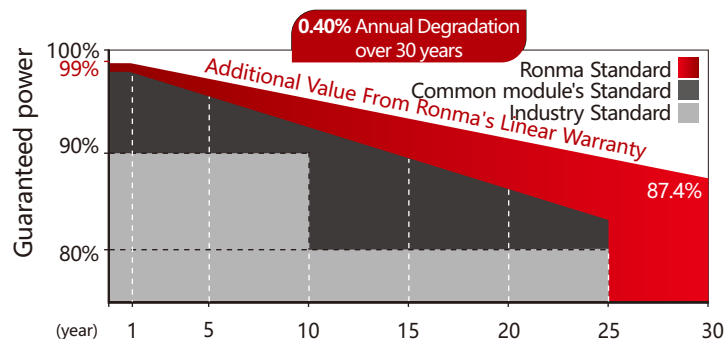
ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

OHSAS 18001: Occupational Health and Safety Management System

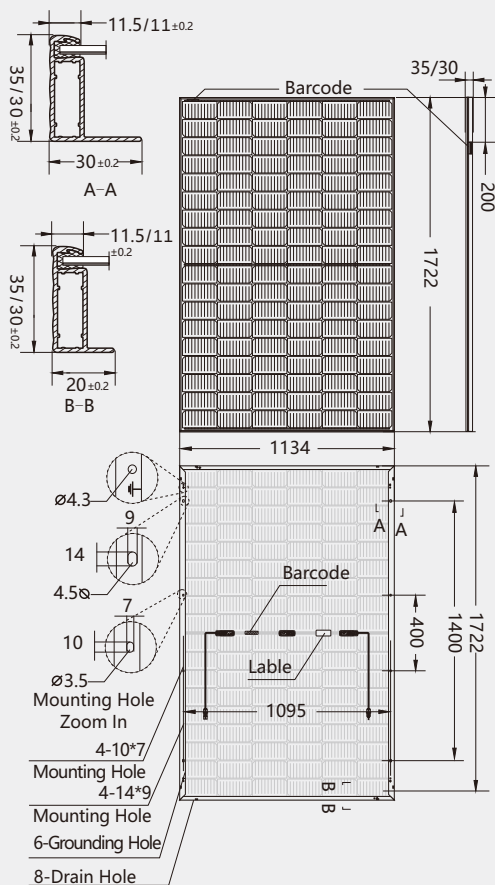
LINEAR PERFORMANCE WARRANTY

12-year product warranty / 30-year linear power warranty



Dimensions of PV Module

Unit: mm



ELECTRICAL CHARACTERISTICS (STC*)

Model Number	RM-420W-182M/108TB	RM-425W-182M/108TB	RM-430W-182M/108TB	RM-435W-182M/108TB	RM-440W-182M/108TB
Rated Power in Watts-Pmax(Wp)	420	425	430	435	440
Open Circuit Voltage-Voc(V)	38.74	38.95	39.16	39.36	39.57
Short Circuit Current-Isc(A)	13.51	13.58	13.65	13.72	13.80
Max. Power Voltage-Vmpp(V)	32.16	32.37	32.58	32.78	32.99
Max. Power Current-Impp(A)	13.06	13.13	13.20	13.27	13.34
Module Efficiency(%)	21.50	21.76	22.02	22.28	22.53
Maximum system voltage	1500V DC				
Fuse Rating(A)	30				
Temperature coefficient Pmax	-0.29%/°C				
Temperature coefficient Isc	0.045%/°C				
Temperature coefficient Voc	-0.25%/°C				
Refer. Bifacial Factor	80±5%				

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

WORKING CHARACTERISTICS (NOCT*)

Model Number	RM-420W-182M/108TB	RM-425W-182M/108TB	RM-430W-182M/108TB	RM-435W-182M/108TB	RM-440W-182M/108TB
Rated Power in Watts-Pmax(Wp)	316	320	323	327	331
Open Circuit Voltage-Voc(V)	36.80	37.00	37.20	37.39	37.59
Short Circuit Current-Isc(A)	10.91	10.96	11.02	11.08	11.14
Max. Power Voltage-Vmpp(V)	29.95	30.19	30.30	30.50	30.73
Max. Power Current-Impp(A)	10.55	10.60	10.66	10.72	10.77
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

5%	Pmax(Wp)	441	446	452	457	462
	Efficiency(%)	22.58	22.84	23.12	23.40	23.66
15%	Pmax(Wp)	483	488.75	494.5	500.25	506
	Efficiency(%)	24.73	25.03	25.32	25.62	25.91
25%	Pmax(Wp)	525	531.25	537.5	543.75	550
	Efficiency(%)	26.89	27.22	27.53	27.85	28.17

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
Size of cell(mm)	182×91	Size of module(mm)	1722×1134×35
Type of cell	N-TOPCon Mono	Weight(kg)	25.8
Thickness of glass(mm)	2.0	Cables/connectors	4.0mm ² , MC4 compatible
Junction box	IP68	Length of Cable	+300mm/-300mm(connector included)

PACKAGING CONFIGURATION

	35	30
Number of Modules Per 40ft (HQ) Container	806	936
Number of Modules Per Pallet	31	36
Number of Pallets Per 40ft (HQ) Container	26	26
Packaging Box Dimensions (l×w×h) (mm)	1750×1120×1260	1750×1120×1260
Box Gross Weight (kg)	824	953

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT
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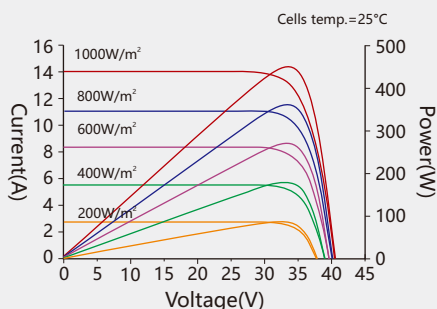


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RM-440W-182M/108TB I-V characteristics at different irradiances



I-V characteristics at different temperatures

