

SOLAR'S MOST TRUSTED



REC ALPHA[®] PURE-RX SERIES

PRODUCT SPECIFICATIONS

470 WP

22.6% EFFICIENCY

21.0^W / SQ-FT



COMPACT PANEL SIZE

9 A MODULE CURRENT
COMPATIBLE WITH MLPE



ELIGIBLE



LEAD-FREE
ROHS COMPLIANT

EXPERIENCE



PERFORMANCE

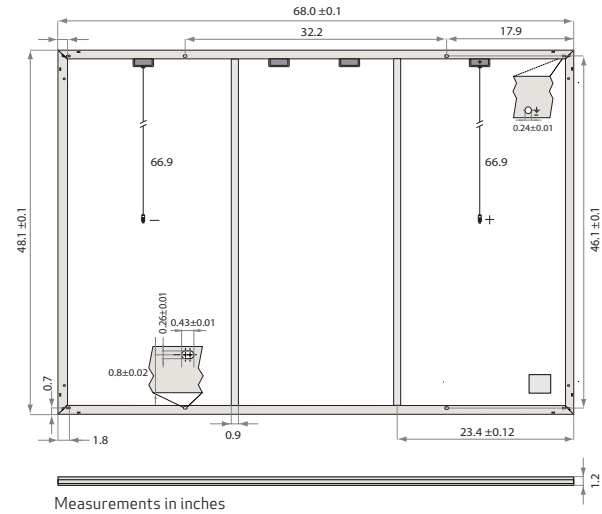


REC ALPHA PURE-RX SERIES

PRODUCT SPECIFICATIONS

GENERAL DATA

Cell type:	88 half-cut bifacial REC heterojunction cells with lead-free, gapless technology
Glass:	0.12 in solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet:	Highly resistant polymer
Frame:	Anodized aluminum (black)
Junction box:	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4 PV-KBT4/KST4 (12 AWG) in accordance with IEC 62852, IP68 only when connected
Cable:	12 AWG solar cable, 66.9 + 66.9 in in accordance with EN 50618
Dimensions:	68.0 x 48.1 x 1.2 in (22.4 sq-ft)
Weight:	51.6 lbs
Origin:	Made in Singapore



ELECTRICAL DATA

Product Code*: RECxxxAA Pure-RX

	450	460	470
Power Output - P_{MAX} (Wp)	450	460	470
Watt Class Sorting - (W)	0/+10	0/+10	0/+10
Nominal Power Voltage - V_{MPP} (V)	54.3	54.9	55.4
Nominal Power Current - I_{MPP} (A)	8.29	8.38	8.49
Open Circuit Voltage - V_{OC} (V)	65.1	65.3	65.6
Short Circuit Current - I_{SC} (A)	8.81	8.88	8.95
Power Density (W/sq-ft)	20.1	20.5	21.0
Panel Efficiency (%)	21.6	22.1	22.6
Power Output - P_{MAX} (Wp)	343	350	358
Nominal Power Voltage - V_{MPP} (V)	51.2	51.7	52.2
Nominal Power Current - I_{MPP} (A)	6.70	6.77	6.86
Open Circuit Voltage - V_{OC} (V)	61.3	61.6	61.8
Short Circuit Current - I_{SC} (A)	7.11	7.17	7.23

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m², temperature 77°F (25°C)), based on a production spread with a tolerance of P_{MAX} , V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s)). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

MAXIMUM RATINGS

Operational temperature:	-40 ... +185°F
System voltage:	1000 V
Test load (front):	+7000 Pa (146.2 lbs/sq-ft)*
Test load (rear):	-4000 Pa (83.5 lbs/sq-ft)*
Series fuse rating:	25 A
Reverse current:	25 A

* See installation manual for mounting instructions.
Design load = Test load / 1.5 (safety factor)

WARRANTY

	Standard	REC ProTrust	
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

The REC ProTrust Warranty is only available on panels purchased through an REC Certified Solar Professional installer. Warranty conditions apply. See www.recgroup.com for more details.

Available from:

CERTIFICATIONS

IEC 61215:2021, IEC 61730:2016, UL 61730
IEC 62804 PID
IEC 61701 Salt Mist
IEC 62716 Ammonia Resistance
ISO 11925-2 Ignitability (EN 13501-1 Class E)
IEC 62782 Dynamic Mechanical Load
IEC 61215-2:2016 Hailstone (35mm)
IEC 62321 Lead-free acc. to RoHS EU 863/2015
UL 61730 Fire Type 2
ISO 14001, ISO 9001, IEC 45001, IEC 62941



Declare.

TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P_{MAX} :	-0.24 %/°K
Temperature coefficient of V_{OC} :	-0.24 %/°K
Temperature coefficient of I_{SC} :	0.04 %/°K

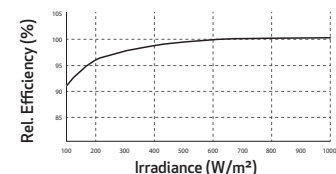
* The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	594 (18 pallets)
Panels per 53 ft truck:	792 (24 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

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REC WARRANTY

REC's ProTrust Warranty package covers product, performance, and labor – and is exclusively offered by REC Certified Solar Professional installers. This means unprecedented savings, more economic security, and greater energy autonomy for consumers.



PRODUCT

Covers panel defects and promises superior quality for at least 20 years. All panels are eligible for a **+5 year product warranty extension**, as part of the REC ProTrust Warranty.

PERFORMANCE

Ensures that REC panels perform exactly as expected to – every year for 25 years. Higher warranted power and higher annual yields, enable greater ROI predictability.

LABOR

Unique to the REC ProTrust Warranty, this gives added protection in the unlikely event that an REC panel needs to be serviced.

The table below provides an overview of REC value-adding warranties by system size, applicable to all products:

REC warranty type	REC PROTRUST WARRANTY		REC'S LEADING STANDARD WARRANTY
Installer group	Exclusive to REC Certified Solar Professional installers		All installers
System size	<25 kW	25-500 kW	Any
Product Warranty (years)	25*	25*	20
Performance Warranty (years)	25	25	25
Labor Warranty (years)	25*	10*	0

*Installations must be registered via REC SunSnap app or REC ProPortal

The following table provides an overview of REC's 25-year Performance Warranty by product, applicable to panels delivered to REC customers on or after October 1, 2018:

Product Series	PERFORMANCE WARRANTY		
	Year 1 minimum power	Year 2-25 maximum annual degradation	Guaranteed % of nameplate power in year 25
REC Alpha	98.0%	0.25%	92.0%
REC N-Peak 2		0.5%	86.0%
REC N-Peak			
REC TwinPeak 4	97.5%	0.7%	80.7%
REC TwinPeak <small>(60-cell format, excluding REC TwinPeak 4)</small>		0.5%	85.5%
REC TwinPeak <small>(72-cell format)</small>			

(Except REC TwinPeak 4, other REC TwinPeak products not available in Germany)

Visit the REC Download Center for details of each product's warranty conditions: www.recgroup.com/warranty



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REC CERTIFIED SOLAR PROFESSIONAL CERTIFICATE FOR SAVE A LOT SOLAR

REC RCSPS ARE RIGOROUSLY SELECTED BY REC TO REPRESENT OUR SOLAR PRODUCTS, COMBINING REC'S 25+ YEARS OF INDUSTRY EXPERIENCE WITH THE CHOSEN SOLAR COMPANY'S LOCAL EXPERTISE.

VALID THROUGH APRIL 2026



A handwritten signature in black ink, appearing to read 'Paul DeBevoise'.

VP Global Marketing &
Product Management