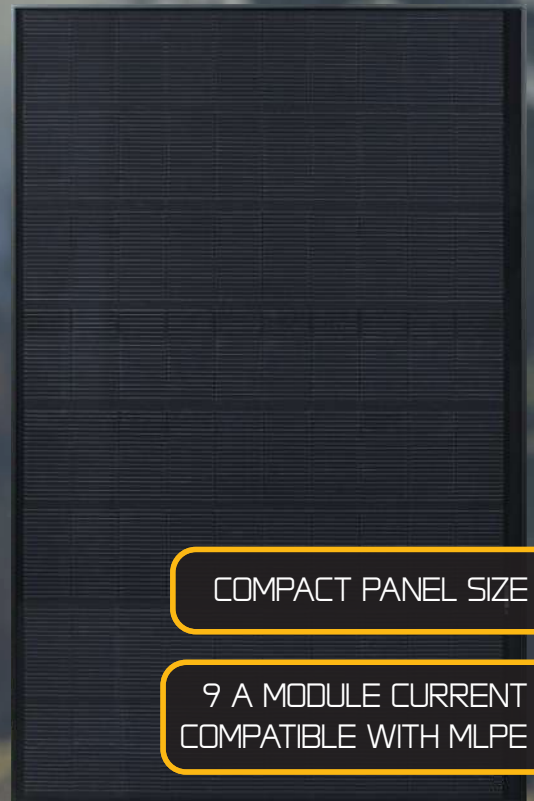


SOLAR'S MOST TRUSTED



# REC ALPHA<sup>®</sup> PURE-RX SERIES ALPHA EXPLAINED



COMPACT PANEL SIZE

9 A MODULE CURRENT  
COMPATIBLE WITH MLPE

470 WP  
226  $\frac{W}{M^2}$



ELIGIBLE

EXPERIENCE



PERFORMANCE



The REC Alpha Pure-RX Series builds on the successes of previous REC Alpha products in uniting leading cell technology to create a revolutionary, powerful and reliable solar panel that hits the sweet spot in terms of power, weight and size:



## Heterojunction cells

- Combines the best of modern cell technology
- Highly efficient cells for high performance
- Larger cells capture more light for more energy generation

## N-type technology = more power

- No initial power loss (no LID)
- You get the power you pay for



## Advanced gapless cell connections

- Eliminates soldering for better build quality
- Reduces cell stress for long-term durability
- Increases power and keeps panel compact

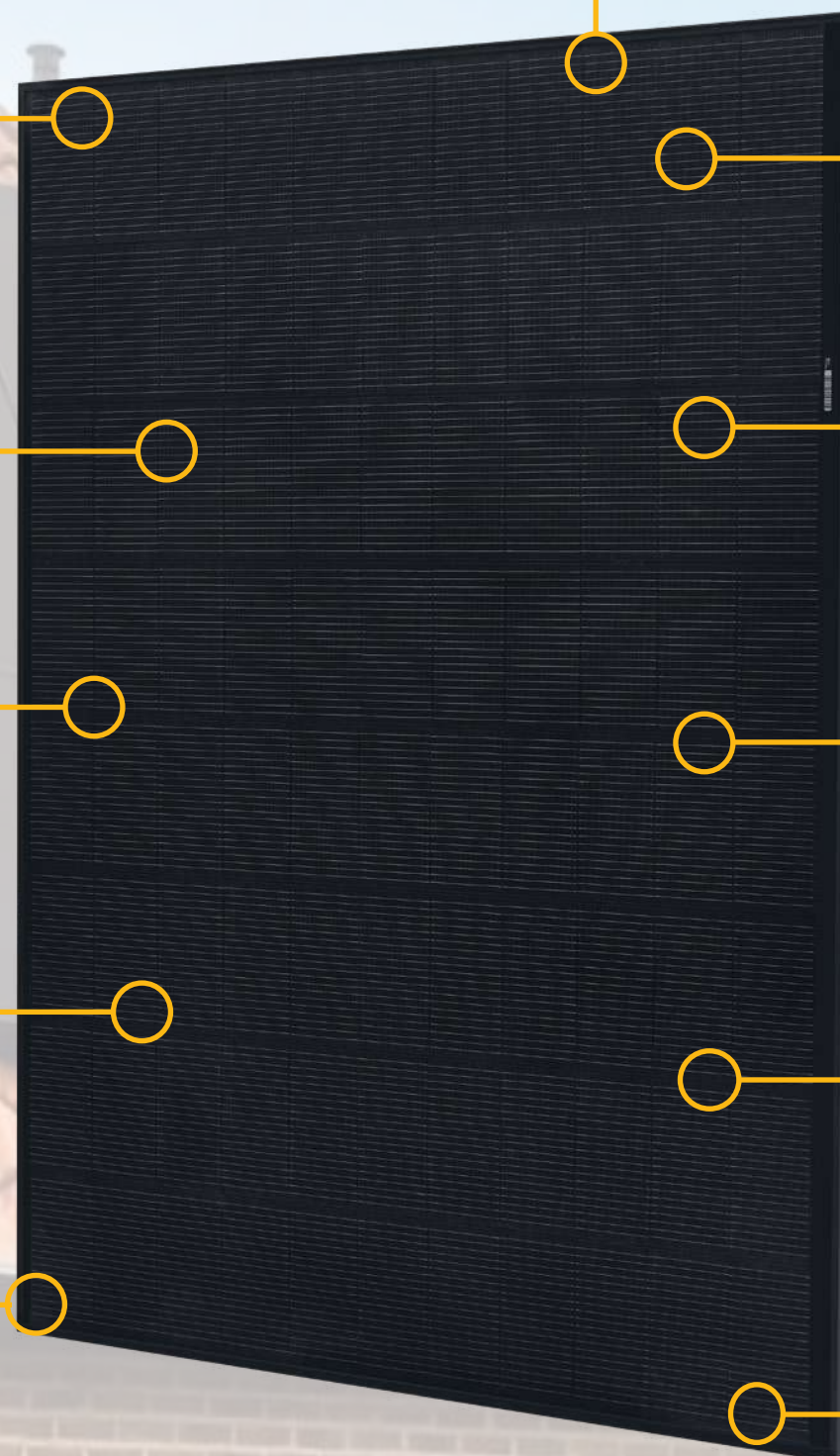
## Higher light transmission

- Special anti-reflective glass increases light transmission for higher power



## Guaranteed better durability

- Withstands up to 7000 Pa
- Better protection against harsh weather



## Improved looks

- Gapless cells for great aesthetics
- Full black appearance for an elegant look

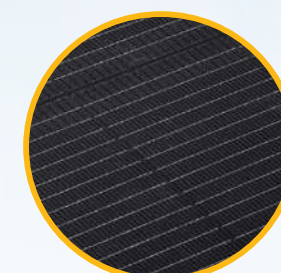


## High power density of 226 W/m<sup>2</sup>

- Generates more clean energy from available rooftop space

## Higher efficiency at the hottest times

- Leading temperature coefficient for more production when the sun shines strongest
- Better performance in hot conditions



## Low current through 4-section layout

- Cell layout in 4 sections keeps panel current around 9 A
- Ensures easy compatibility with modern optimizers and microinverters
- Improves output under shaded conditions

## Environmentally-friendly

- Manufacturing with minimal carbon footprint



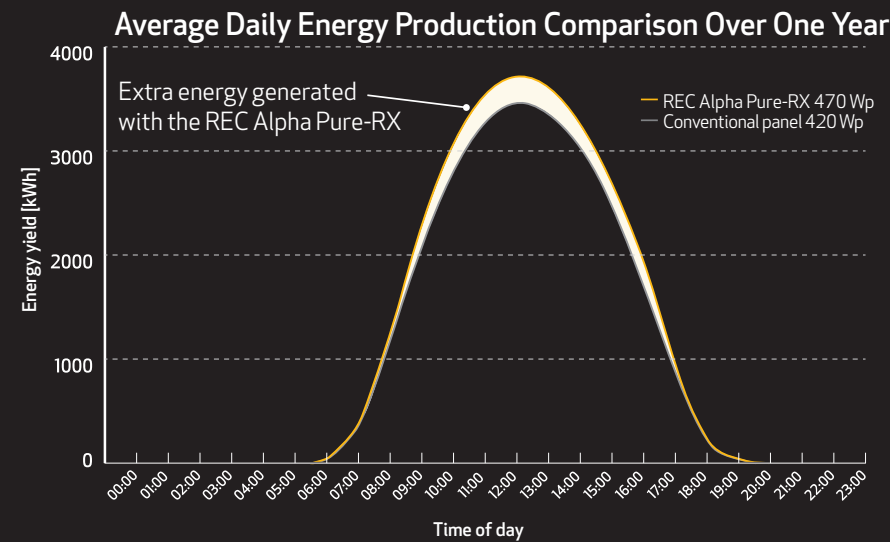
## Exceptional quality

- Made in REC's state of the art, energy efficient facility in Singapore
- Highly automated production for improved efficiency and reliability
- Consistently one of the lowest warranty claims rate in solar



# GREATER ANNUAL YIELDS FROM DAWN TO DUSK

The REC Alpha Pure-RX packs in more energy than ever before. With no LID, a leading temperature coefficient and its high power density, it is ideal for increasing energy yields and making the most of available rooftop space.



Calculations based on simulation results for full calendar year, based on an 1.2 kWp system in Palm Springs, CA, USA. Peak REC Alpha Pure-RX energy yield difference at midday: +6%, with an overall greater annual yield of 5.7%. Performance may vary dependent on location.

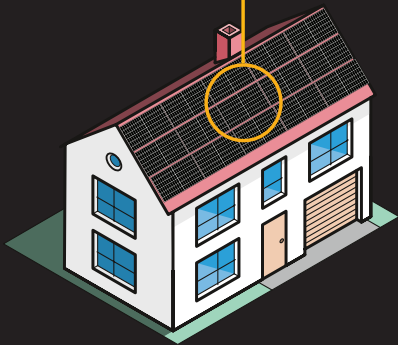
MORE  
POWER  
WITH THE  
REC ALPHA  
PURE-RX!

# MAXIMIZE SYSTEM POWER FOR MAXIMUM SAVINGS

Optimum use of space is key to a good solar installation. The dimensions of the REC Alpha Pure-RX enable you to pack in as much power as possible and generate more energy.

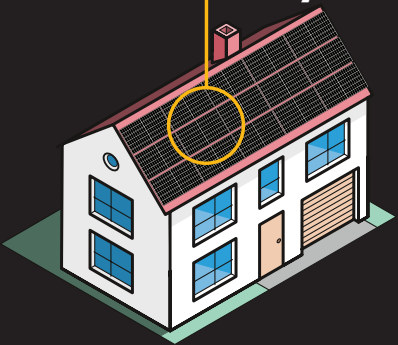
15 x 420 Wp conventional panels  
(> 1.94 m<sup>2</sup> panel area):

System size = 6.3w kW



14 x 470 Wp REC Alpha Pure-RX  
(2.08 m<sup>2</sup> panel area):

System size = 6.6 kW

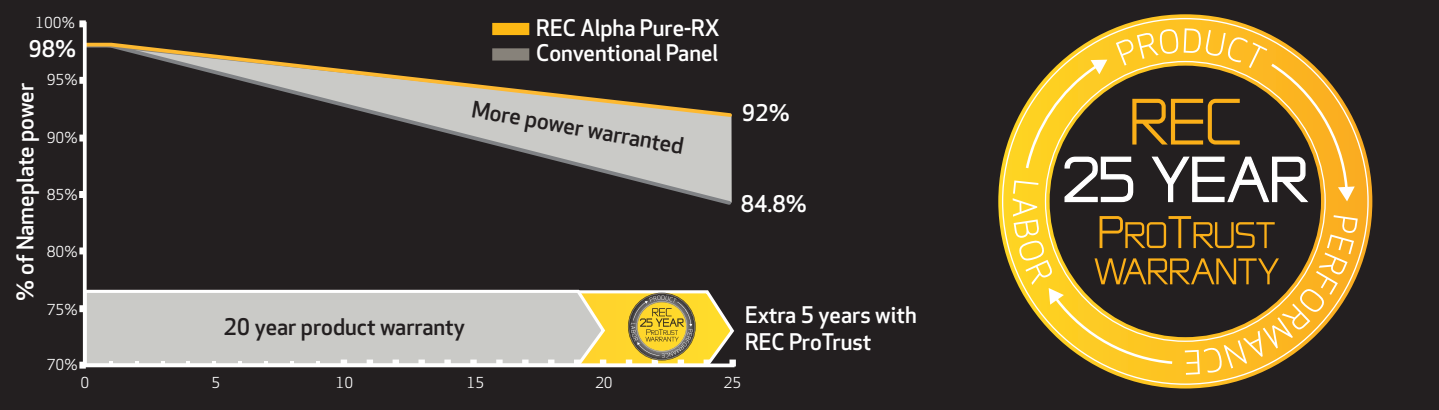


Based on an available roof area of 30 m<sup>2</sup>.

The comparison is clear: in a regular residential installation, the REC Alpha Pure-RX offers more power than conventional panels for more energy and more savings.

# MORE WARRANTED POWER AFTER 25 YEARS

REC's consistently low claims rate justifies an outstanding warranty which reflects this leadership and supports our premium product quality.



Exclusive to REC Certified Solar Professionals, the REC ProTrust Warranty offers enhanced product and labor coverage\*, ensuring peace of mind and a lifetime of high power generation:

- 25 years performance warranty
- 25 years product warranty
- Up to 25 year labor warranty\*

\*Conditions apply. See [www.recgroup.com/protrust](http://www.recgroup.com/protrust) for more details

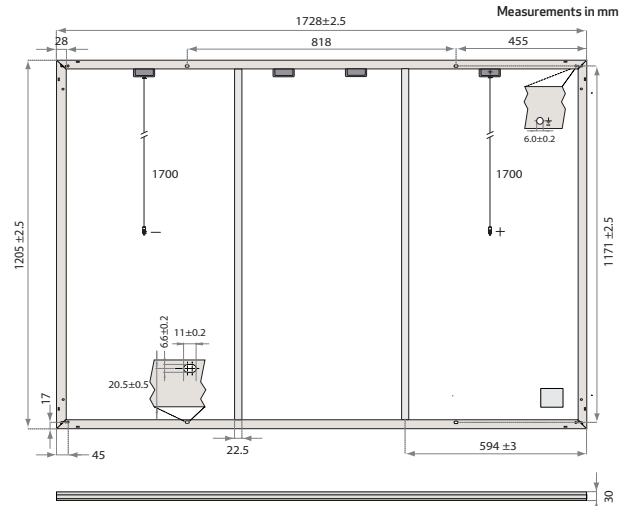


# REC ALPHA<sup>®</sup> PURE-RX SERIES

## DATASHEET

### GENERAL DATA

Cell Type	88 half-cut bifacial REC heterojunction cells, with gapless technology
Glass	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet	Highly resistant polymer (Black)
Frame	Anodized aluminum (Black)
Junction Box	4-part, 4 bypass diodes, IP68 rated, in accordance with IEC 62790
Connectors	Stäubli MC4 PV-KBT4/KST4 (4 mm <sup>2</sup> ) in accordance with IEC 62852, IP68 only when connected
Cable	4 mm <sup>2</sup> solar cable, 1.7 m + 1.7 m in accordance with EN50618
Dimensions	1728 x 1205 x 30 mm (2.08 m <sup>2</sup> )
Weight	22.7 kg
Origin	Made in Singapore



### ELECTRICAL DATA

PRODUCT CODE\*: RECxxxAA Pure-RX

Power Output - P <sub>MAX</sub> (W <sub>p</sub> )	450	460	470
Watt Class Sorting - (W)	0/+10	0/+10	0/+10
Nominal Power Voltage - V <sub>MPP</sub> (V)	54.3	54.9	55.4
Nominal Power Current - I <sub>MPP</sub> (A)	8.29	8.38	8.49
Open Circuit Voltage - V <sub>OC</sub> (V)	65.1	65.3	65.6
Short Circuit Current - I <sub>SC</sub> (A)	8.81	8.88	8.95
Power Density (W/m <sup>2</sup> )	216	221	226
Panel Efficiency (%)	21.6	22.1	22.6

Power Output - P <sub>MAX</sub> (W <sub>p</sub> )	343	350	358
Nominal Power Voltage - V <sub>MPP</sub> (V)	51.2	51.7	52.2
Nominal Power Current - I <sub>MPP</sub> (A)	6.70	6.77	6.86
Open Circuit Voltage - V <sub>OC</sub> (V)	61.3	61.6	61.8
Short Circuit Current - I <sub>SC</sub> (A)	7.11	7.17	7.23

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m<sup>2</sup>, temperature 25°C), based on a production spread with a tolerance of P<sub>MAX</sub>, V<sub>OC</sub> & I<sub>SC</sub> ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s). \* Where xxx indicates the nominal power class (P<sub>MAX</sub>) at STC above.

### MAXIMUM RATINGS\*

Operational Temperature	-40 °C - 85 °C
System Voltage	1000 V
Maximum Test Load (front)	+7000 Pa (713 kg/m <sup>2</sup> )
Maximum Test Load (rear)	-4000 Pa (407 kg/m <sup>2</sup> )
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

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

### TEMPERATURE RATINGS\*

Nominal Module Operating Temperature	44 °C ± 2 °C
Temperature coefficient of P <sub>MAX</sub>	-0.24% / °C
Temperature coefficient of V <sub>OC</sub>	-0.24% / °C
Temperature coefficient of I <sub>SC</sub>	0.04% / °C

\*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 13.6 m truck	660 (20 Pallets)

### CERTIFICATIONS

IEC 61215:2021; IEC 61730:2016; UL 61730  
 ISO 11925-2 Ignitability (EN 13501-1 Class E)  
 IEC 62716 Ammonia Resistance  
 IEC 61701 Salt Mist (SM6)  
 IEC 61215:2016 Hailstone (35 mm)  
 UL 61730 Fire Type 2  
 ISO 14001; ISO 9001; IEC 45001; IEC 62941



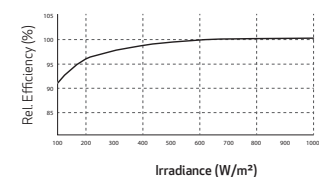
### WARRANTY

	Standard	REC ProTrust	
Installed by an REC Certified 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](http://www.recgroup.com) for more details

### LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Available from:



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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Specifications subject to change without notice.

Ref: PM-DS-12-06-Rev-4.4 5.2024