



REC ALPHA PURE-RX SERIES

Premium solar panels with
pure power and record strength



REC ALPH α PURE-RX SERIES



Heterojunction technology (HJT)

-0.24% / °C Temp. Coeff.

55 mm hail resistant

>92% power in Year 25

Full-black design

Made in Singapore

BUILT TO LAST



Micro-crack resistant

Standard panels use soldered ribbons that can crack with heat and cold cycles. REC eliminates this entirely as the cell connections in the REC Alpha Pure-RX are solder free.

Cyclone-rating strength

Reinforced with innovative support bars, REC Alpha Pure-RX panels are engineered for superior mechanical strength – handling hail impact, high snow loads, uplift from cyclone-force winds, and the daily thermal stress of the Australian climate.



Resistant to 55 mm hail, an REC record

After being blasted with 55 mm hailstones, REC Alpha Pure-RX panels showed no glass breakage or power failure. The industry baseline is 25 mm. But given today's weather conditions, this basic standard is no longer sufficient. REC takes its robustness and premium quality to new heights.

Beat the heat with REC

While other panels take a power nap in the heat, REC's HJT cells show more endurance and greater yields – especially when the sun shines strongest at midday. That's low temperature coefficient!

A PROTECTED INVESTMENT

Triple 25-year REC ProTrust warranty*

A 25-year warranty for each of Product, Power, and Labor – exclusively from REC Certified Solar Professional installers.

92% minimum power guaranteed in Year 25

This is a contractual promise, not a projection. At only 0.25%, the REC Alpha Pure-RX has the lowest annual degradation rate, ensuring you keep more of your power.



25-year Labor coverage with REC ProTrust

If an REC panel needs to be serviced or replaced, REC will pay a fixed labor fee to an REC Certified Solar Professional installer for approved claims. Most other brands stop at the panel itself!



CERTIFIED
SOLAR
PROFESSIONAL



*REC ProTrust Warranty applies only for (i) REC panels installed by an REC Certified Solar Professional, and (ii) panels have been registered by the installer with REC. Subject to System Size and further conditions.

VALUE-ADDING WARRANTY

Transferrable warranty

The full warranty stays with the property, making homes more attractive at resale and giving future owners the same protection.

Approved for near-coastal installations

REC Alpha Pure-RX is rated for environments that would void the warranty of panels from many other brands.



Auckland, New Zealand
REC TwinPeak 4

Good to know:

The REC ProTrust warranty costs nothing extra – it's your reward for choosing an REC Certified Solar Professional installer.

Ask your installer if they are certified. And if the original commissioning installer goes out of business, REC ProTrust is still valid; REC has you covered!

A TRUSTED BRAND IN SOLAR

European heritage

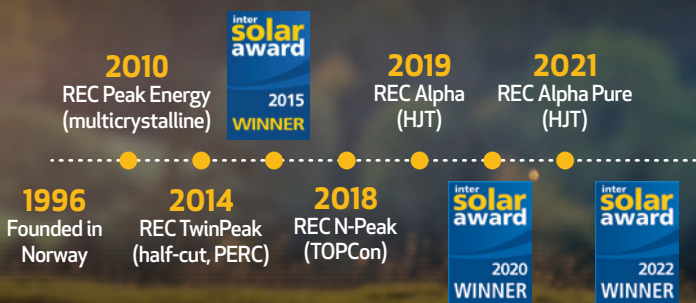
Founded in Norway in 1996, REC is truly a solar pioneer – a leading solar brand with a history and a future!

Made in Singapore

Manufactured with precision and ethics in Singapore, REC panels consistently deliver product quality beyond expectations.

Leading by example

REC has continuously inspired the solar industry with its progressions in panel technology, including mastering HJT – the solar technology of the future, already at REC today.



Multi-award winner

REC has been steadily recognized for quality, innovations, and after-sales service by the solar industry's most credible bodies.

Your REC support in ANZ:

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[View Datasheet](#)



REC

SOLAR'S MOST TRUSTED



REC ALPHA[®] PURE-RX

DATASHEET



PURE STRENGTH

55 MM HAIL RESISTANT ¹

+7000 PA / -4000 PA
WITH 4 POINT CLAMPING

+10000 PA / -6000 PA
WITH 6 POINT CLAMPING

450 - 475W
HETEROJUNCTION
TECHNOLOGY

228 ^{W/M²}

POWER DENSITY

>92%

POWER IN YEAR 25

-0.24%/°C

TEMPERATURE
COEFFICIENT OF P_{MAX}



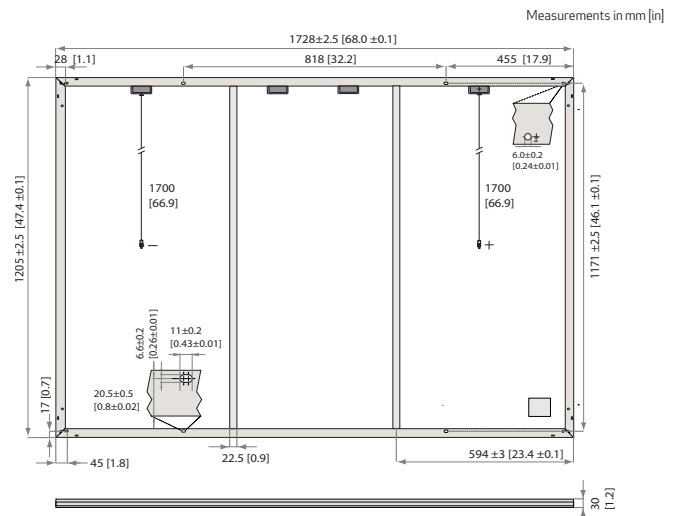
ELIGIBLE

REC ALPHA® PURE-RX 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 62790:2020
Connectors	Stäubli MC4 PV-KBT4/KST4 (4 mm²) in accordance with IEC 62852:2014, IP68 only when connected
Cable	4 mm² solar cable, 1.50 m + 1.50 m in accordance with EN50618:2014
Dimensions	1728 x 1205 x 30 mm (2.08 m²)
Weight	22.7 kg
Origin	Made in Singapore



Specifications subject to change without notice.

ELECTRICAL DATA

PRODUCT CODE*: RECxxxAA Pure-RX

Power Output - P _{MAX} (W _p)	450	455	460	465	470	475
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V _{MPP} (V)	54.3	54.6	54.9	55.2	55.4	55.5
Nominal Power Current - I _{MPP} (A)	8.29	8.34	8.38	8.43	8.49	8.56
Open Circuit Voltage - V _{OC} (V)	65.6	65.6	65.7	65.7	65.7	65.7
Short Circuit Current - I _{SC} (A)	8.81	8.84	8.88	8.91	8.95	9.00
Power Density (W/m²)	216	219	221	223	226	228
Panel Efficiency (%)	21.6	21.9	22.1	22.3	22.6	22.8

CERTIFICATIONS

ISO 14001; ISO 9001; IEC 45001; IEC 62941
IEC 61215:2021; IEC 61730:2023; UL 61730
IEC 61730 Fire Class C
ISO 11925-2 Ignitability (EN 13501-1 Class E)
EN 13501-5 Roof Fire Performance (B _{ROOF} T2)
IEC 62716 Ammonia Resistance (Optional)
IEC 61701 Salt Mist - SM6 (Optional)
IEC 61215:2021 Hailstone (35 mm)
UL 61730 Fire Type 2
IEC TS 63126 Level 1

STC

NMOT

Power Output - P _{MAX} (W _p)	342	346	350	354	358	361
Nominal Power Voltage - V _{MPP} (V)	51.2	51.5	51.7	52.0	52.2	52.3
Nominal Power Current - I _{MPP} (A)	6.70	6.74	6.77	6.81	6.86	6.91
Open Circuit Voltage - V _{OC} (V)	61.8	61.8	61.9	61.9	61.9	61.9
Short Circuit Current - I _{SC} (A)	7.12	7.14	7.18	7.20	7.23	7.27

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m², temperature 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 20°C, windspeed 1 m/s). *Where xxx indicates the nominal power class (P_{MAX}) at STC above.

TEMPERATURE COEFFICIENT *

P _{MAX} -0.24%/°C	V _{OC} -0.24%/°C	I _{SC} 0.04%/°C	*The temperature coefficients stated are linear values
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MODULE RATINGS

Module Operating Temperature [T98] ⁵	80°C
Min Environmental Temperature	-40°C
Nominal Module Operating Temperature	44 ± 2°C
Max Hail Rating ⁶	55 mm @ 33.9 m/s
System Voltage	1000 V
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

⁵98th percentile operating temperature
⁶Kiwa PVEL H55 test result

MAXIMUM TEST LOAD*

Front (4-Point)*	+7000 Pa (714 Kg/m²)
Rear (4-Point)*	-4000 Pa (408 Kg/m²)
Front (6-Point)**	+10000 Pa (1,020 Kg/m²)
Rear (6-Point)**	-6000 Pa (612 Kg/m²)
Design load = Test load / 1.5 (safety factor)	

*IEC 61730/UL 61730 certified. Refer to installation manual.
**Internal testing. Refer to installation manual.



WARRANTY

	Standard	REC ProTrust	
Installed by an REC	No	Yes	Yes
Certified Professional			
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%

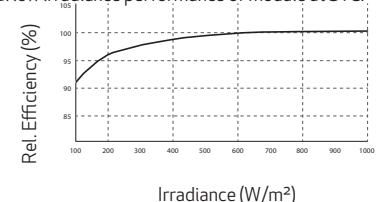
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DELIVERY INFORMATION

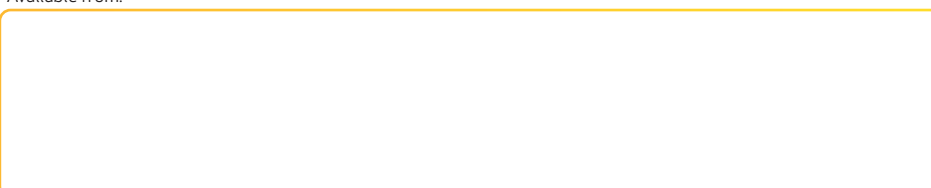
Panels per Pallet	33
Panels per 40 ft GP/high cube container	594 (18 Pallets)
Panels per 13.6 m truck	660 (20 Pallets)

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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